BASIC AMERICAN
MEDICAL PRODUCTS

ZENITH
SERIES

Zenith 9000 APS

Advanced Positioning System

INSTRUCTIONS FOR USE
SERVICE MANUAL

To avoid personal injury or damage to bed, please read all sections pertaining to the bed model before use.

ETL/UL/CSA APPROVED
UL 60601-1
IEC 60601-2-38
CSA 22.2 601.1

This service manual covers the following Zenith APS Models:

76” & 80” Full Electric with Pedal Lock Caster System & Grid Decks = APS98174;
76” & 80” Full Electric with Pedal Lock Caster System, Grid Decks, and Underbed Light = APS981741;
76” & 80” Full Electric with Pedal Lock Caster System, Grid Decks, Underbed Light,
and Onboard Battery Backup System = APS981742;

BASIC AMERICAN
MEDICAL PRODUCTS

Basic American Medical Products
336 Trowbridge Drive
Fond du Lac, WI 54937

For Zenith 9000 Bed Service Parts
please contact our Customer Service Department
at 1-800-365-2338

GF Health Products, Inc.
2935 Northeast Parkway
Atlanta, GA 30360
www.grahamfield.com

To order a Zenith 9000 Bed
please contact a Graham Field Sales Representative
at 1-800-554-9215

IMPORTANT NOTICE

GF Health Products, Inc. is not responsible for typographical errors.
All illustrations, specifications, packaging, and warranties contained in this Service Manual
are based on the latest product information available at the time of printing.
The most current product information can be found online at www.grahamfield.com.

Please check all parts for shipping damage and test before using.
In case of damage, DO NOT USE.

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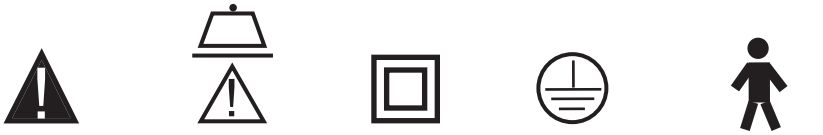


Consult Accompanying Documents | Safe Working Load | Double Insulated | Protected Grounded Device | Type B Equipment & Applied Parts

IMPORTANT SAFETY AND WARNING INFORMATION

This product is a variable height, adjustable mattress platform, which will provide comfort and convenience for residents/patients and caregivers in long term care settings.

The MAXIMUM SAFE WORKING LOAD for the APS 9000 Bed with weight evenly distributed, including bedding, resident/patient, support surface, and all accessories, is 600 lbs.

NEVER operate the bed if a Power Cord or Plug is damaged or not working properly. Contact qualified Service Personnel for examination and repair. Always unplug the Power Cord when performing any maintenance on the bed.

DO NOT open assemblies such as the Actuators, Hand Control, or Control Box. If unauthorized personnel perform work on these components, the manufacturer's warranty becomes void.

DO NOT use unauthorized parts, accessories, or adaptors other than those specified/authorized by GF Health Products, Inc.

When operating the HI/LO, Knee, or Back Functions of the bed, ALWAYS ensure that the confined individual is positioned properly within the confines of the bed. DO NOT let any extremities protrude over the side or between the bed rails when performing these functions.

DO NOT lower the bed when objects are beneath it. Failure to inspect under the bed can result in damage to property or personal injury.

The bed's Pendant Cord MUST BE ROUTED AND SECURED PROPERLY to ensure it does not become entangled and eventually severed during use. Also make sure all electrical cords DO NOT get tangled around the bed, side rails, or legs during transport or normal operation of the bed.

When using nasal-type or masked-type administering equipment, all oxygen or air tubing MUST BE ROUTED AND SECURED PROPERLY to ensure that the tubing does not become entangled and eventually severed during the normal operation of the bed.

Keep all moving parts free of obstructions (i.e. blankets/sheets, heating blankets/pads, wiring, etc.).

Beds manufactured by Basic American Medical Products are designed for use within an institutional healthcare environment (i.e. assisted living, skilled nursing, transitional care, rehabilitational care, etc.).

DO NOT use the assist devices as push handles for moving the bed. Assist devices can be deformed or broken if excessive side pressure is exerted. Assist devices are not meant for patients considered as high risks for entrapment (i.e. patients with pre-existing conditions such as confusion, restlessness, lack of muscle control, altered mental status, either organic or medicinal, or a combination thereof). Additional safety measures should be considered for such high-risk patients.

NEVER permit more than one (1) person on/in the bed at any time.

Body weight should be evenly distributed over the sleeping surface of the bed. DO NOT allow the patient to lay, sit, or lean in such a way that their entire body weight is placed only on the raised head or foot sections of the bed. This especially applies when repositioning or transferring a patient in or out of the bed. Increased risk may occur when the patient's size and/or weight are inappropriate for the bed's dimensions or weight capacity.

Risk of entanglement or injury may occur if the mattress used with mattress retainers does not fill the entire width between stops or which compresses to less than 1.50 inches under user's weight.

Mattress must be properly sized to fit the mattress support platform and must remain centered on the support platform relative to State and Federal guidelines. Recommended minimum dimensions of mattress is 35 inches wide and 6 inches deep. Length should match the mattress support platform. Use of an improperly fitted mattress could result in injury or death.

IMPORTANT: Powered air mattress surfaces may pose a risk of entrapment. Prior to use, ensure the therapeutic benefits outweigh the risk of entrapment.

The bed is intended for use, storage, and transport within a temperature range of -40˚C to +60˚C. It has a water-resistance rating of IPX6 and IS NOT to be power-washed or submersed.

IMPORTANT SAFETY AND WARNING INFORMATION

The head/back and knee/foot decks can be lifted freely by hand for easy cleaning access when patients are not in the bed. If you lift the head/back or knee/foot deck for any reason, please take great care when lowering back down to the prone position - make sure that all body parts are clear of the space between the deck and the bed prior to slowly lowering any deck manually. To avoid injury, DO NOT LET DECKS FALL FREELY FROM ANY ANGLE.

Notice for California Customers -
California Proposition 65 WARNING: This product contains a chemical known to the State of California to cause cancer and reproductive or developmental harm.

Proper routing and tie-off of electrical cabling, especially the power cord, is essential for proper operation and to ensure safety from electrical shock. In the event you are replacing any electrical cabling on your bed, you must make sure the cables are free from any pinch points, obstructions, or stretched so tight that they may come loose or become damaged. In addition, cables should be tied off in such a way to secure them and keep them free from tangling on any part of the bed during normal operation. Refer to your service manual's electrical section for proper cable routing.

ENTRAPMENT & COMPLIANCE INFORMATION

On April 10, 2006, the FDA (U.S. Food and Drug Administration) released long-awaited guidelines for reducing the risk of bed entrapment: *"Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment"*. The new Guidance identifies potential entrapment areas and those body parts most at risk for entrapment; provides design criteria for manufacturers of new hospital/convalescent beds; recommends particular test methods to assess the conformance of existing hospital/convalescent bed systems; and answers frequently-asked questions about entrapment issues.

The new Guidance was a result of a long-standing collaboration between the ***FDA*** and the ***Hospital Bed Safety Workgroup (HBSW)***, formed in 1999. GF Health Products, Inc's Long-Term Care Bed division: *Basic American Medical Products*, is an HBSW charter member. As a result of our commitment to product safety, **all our current long-term care beds have been strictly tested and conform to the new FDA Guidance**.

The guidelines set forth by the FDA Guidance layout specific dimensional limitations on potentially injury-threatening gaps and spaces that can occur between bed system components, such as rails, when not properly installed. GF Health Products, Inc. and Basic American Medical Products have conformed to these guidelines from a manufacturing aspect. However, entrapment issues can often arise when a healthcare provider/facility has not correctly assembled the components on a bed. It is essential that the provider/facility fully understand their responsibility in complying to the guidelines set forth by the FDA in order to avoid injury. To that end, we have provided the FDA's web address at right as a resource for understanding and following these guidelines for the safety of patients/residents. It is also essential to have the correct bed components/accessories that correspond with the needs of the patient/resident and the particular bed you have purchased. Matching the correct bed component that correlates with the regulatory guidelines can be a daunting task. Our sales team at GF Health Products, Inc. and our friendly Customer Service Representatives at Basic American Medical Products can help you sift through the wide array of compliance and bed options. We will help you determine which bed/bed part is best for the patient's/resident's particular needs and help you with any compliance issues.

The Zenith APS 9000 bed and accessories listed in this manual are in full compliance with FDA guidelines for reducing the risk of bed entrapment: "*Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment*".

Details can be found at www.fda.gov.

Regular maintenance of the Long Term Bed is necessary to ensure continuing proper and safe operation. Please read and observe the following recommended maintenance schedule.

ITEM	RECOMMENDED INSPECTION PERIODS		
	Inspect on Receipt	Every 3 Months	Every 6 Months
Maintenance Inspection of All Components at Receipt of Shipment			
Make sure all parts/components are included (*Please see "Unpacking The Bed"*).	X		
Check all bed components for obvious damage.	X		
Inspect the power supply cord for any cuts and/or damage.	X		
Check to see all actuator/motor cords are routed and connected properly to the control box.	X		
Mechanical Inspection of Assemblies			
Inspect all welds on the sleeping surface, frame, and base assemblies for stress fractures.			X
Inspect all fasteners for wear and looseness.			X
IMPORTANT: Lubricate all pivot points, actuator/motor clevis pins, and control arm clevis pins as needed. White Lithium Grease is recommended.			X
Mechanical Inspection of Casters & Pedal Locking Mechanism			
Check the pedal locking mechanism to make sure it engages and disengages properly.		X	
Check the bottom foot pads on the foot end casters, making sure they are clean of debris and undamaged. Replace if needed.		X	
Check all casters to ensure that they roll properly and are unobstructed.		X	
Electrical Inspection of Control Box, Pendant, and Staff Control			
Check the external power cord that plugs into the control box for any chafing, cuts, or wear. Replace if damaged.		X	
Make sure all attaching hardware is securely tightened.		X	
Check all electrical connections for any wear or fractures.		X	
Check the external backup battery (if you have one). Replace if needed.		X	
Check the pendant cord for any chafing, cuts, or wear.		X	
Check all pendant functions - check to make sure each button and associated function work properly (i.e. head section rises when the Head Up button is activated).		X	
Electrical Inspection of Actuators/Motors			
Check the actuator/motor cords for any chafing, cuts, or wear.		X	
Check the range of movement on all motors to ensure they do not bind in the Full Up or Full Down positions.		X	

The following warning labels have been placed on the bed to help protect you and the bed from damage. Please do not remove any labels from the bed.

WARNING!
DO NOT LOWER BED WHEN OBJECTS ARE BENEATH BED. FAILURE TO INSPECT UNDER BED CAN RESULT IN DAMAGE TO PROPERTY OR PERSONAL INJURY.

ATTENTION:
S'assurer de ne pas faire descendre le lit lorsque des objets se trouvent sous le lit. Ne pas inspecter le dessous du lit pourrait entrainer des dommages materiels et des risques de blessures.

CAUTION
THIS BED IS SUITABLE FOR USE ONLY WITH OXYGEN ADMINISTERING EQUIPMENT OF THE NASAL OR MASK TYPE OR A TENT COVERING ONLY THE UPPER HALF (HEAD END) OF THE BED. OXYGEN TENT CANOPIES SHOULD NOT EXTEND BELOW BED SPRING LEVEL. LOCK HAND CONTROL AT FOOT OF BED WHEN USING OXYGEN ADMINISTERING EQUIPMENT.

WARNING!
DO NOT LOWER BED WHEN OBJECTS ARE BENEATH BED. FAILURE TO INSPECT UNDER BED CAN RESULT IN DAMAGE TO PROPERTY OR PERSONAL INJURY.

ATTENTION:
CE LIT PEUT ETRE UTILISE UNIQUEMENT AVEC UN EQUIPMENT DESTINE A L'ADMINISTRATION D'OXYGENE DE TYPE NASAL OU MASQUE OU AVEC UNE TENTE RECOUVRANT SEULEMENT LA MOTTIE AVENT (TETE) DU LIT. LES COTES DE LAS TENTE OXYGENE NE DOIVENT PAS SE PROLONGER PLUS DAS QUE LA SOMMIER DU LIT.

ENVIRONMENTAL SPECIFICATIONS AND STORAGE AND RFI INFORMATION

Operating Conditions
Operation of the bed is based on the following conditions: Ambient Temperature of +10˚C to +40˚C; Relative Humidity of 30% to 75% (Non-condensing); Atmospheric Pressure of 700hPa to 1060hPa; and a Splash Protection of IEC 60529.

Storage
Storage of the bed is based on the following conditions: Ambient Temperature of -10˚C to 70˚C; Relative Humidity of 10% to 100%; and an Atmospheric Pressure of 500hPa to 1060hPa.

Radio Frequency Interference (RFI)
RFI influences most electronic equipment. Caution should be exercised with regard to the use of portable communications equipment in the area around such equipment. If RFI causes erratic behavior, shut the bed off immediately. Leave it off while the transmission is in progress.

SECTION A

ZENITH APS 9000

Bed Set-up Instructions

UNPACKING THE BED

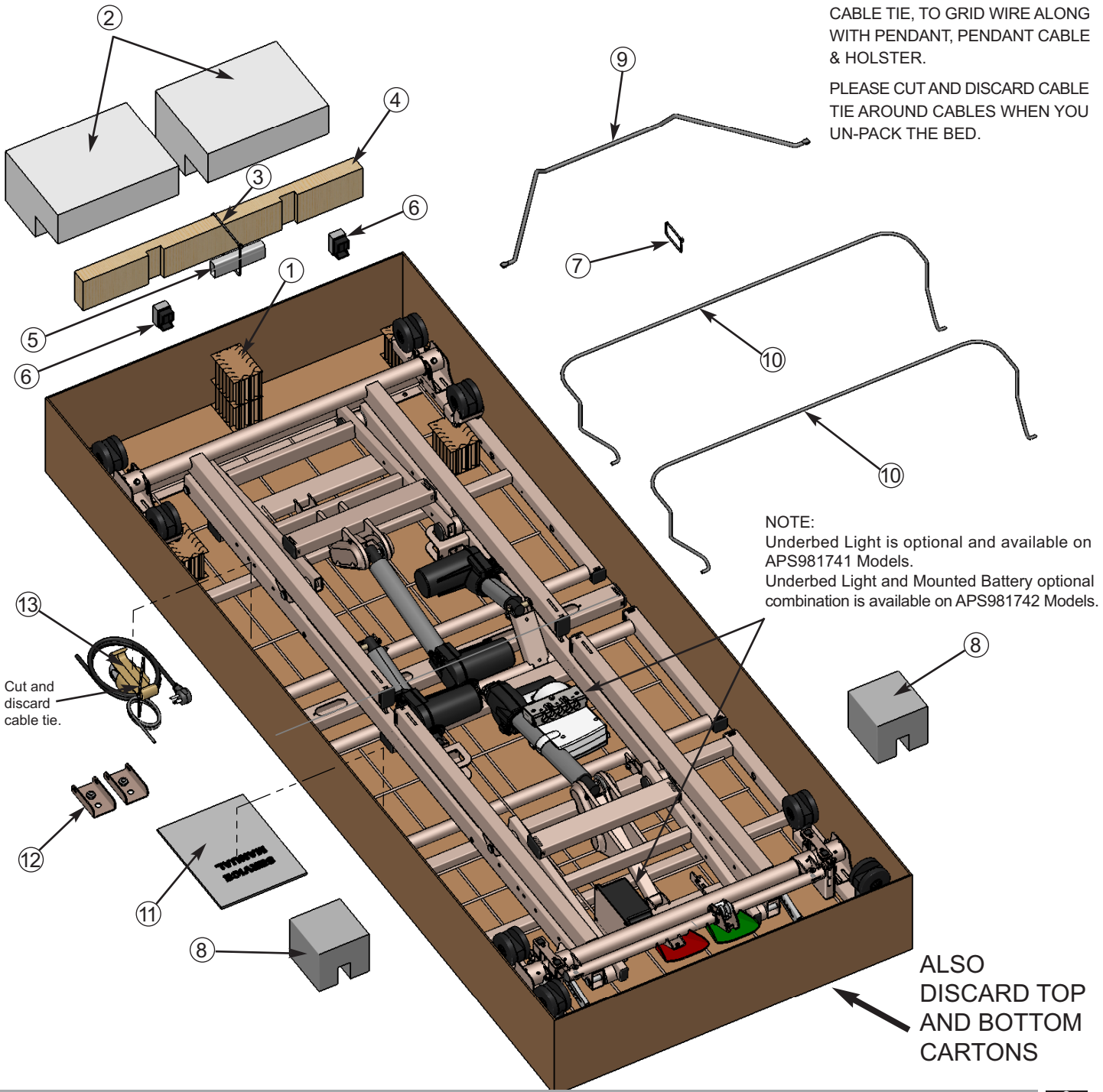
- Make sure all parts/components are included.
- Check all bed components for obvious damage.
- Inspect the Power Supply Cord for any cuts and/or damage.
- Check to see all actuator/motor cables are routed and connected properly to the control box.

DISCARD
1. Middle Foam Block
2. Large Block
3. Large Cable Tie - CUT
4. Notched 2 x 4 Board
5. Foam Wrapping
6. End Caps with Foam
7. Small Cable Tie - CUT
8. Notched Leg Foam

KEEP
9. Wireform Wallsaver
10. Two Mattress Retainers
11. Service Manual/Documents
12. Trendelenberg Brackets & Attaching Hardware in bag
13. Pendant Holster (attached to pendant)

NOTE:
END OF POWER CABLE IS COILED FOR SHIPPING AND TIED, WITH CABLE TIE, TO GRID WIRE ALONG WITH PENDANT, PENDANT CABLE & HOLSTER.

PLEASE CUT AND DISCARD CABLE TIE AROUND CABLES WHEN YOU UN-PACK THE BED.



NOTE:
Underbed Light is optional and available on APS981741 Models.
Underbed Light and Mounted Battery optional combination is available on APS981742 Models.

HEAD- AND FOOTBOARD ASSEMBLY

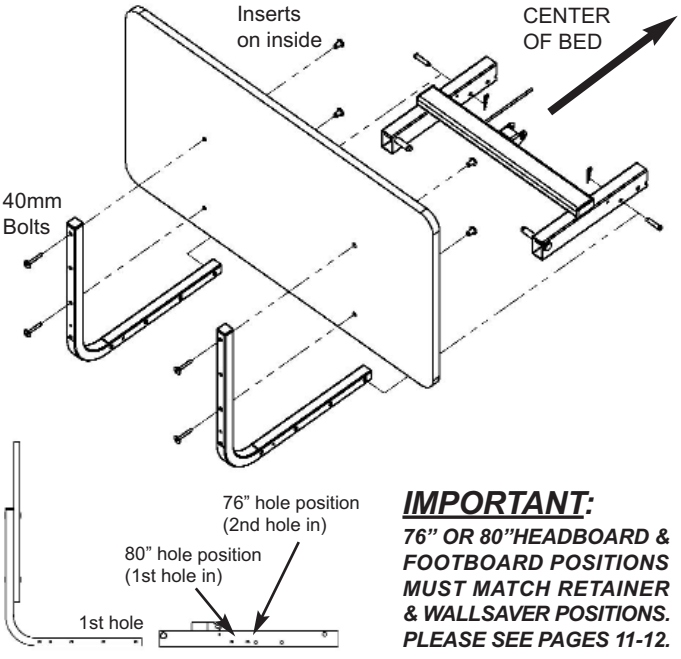
1. HEADBOARD INSTALLATION

- The headboard comes with four pre-installed inserts - consider this the inside of the board.
- Position 2 mounting tubes on the outside of the headboard with “L” facing inward.
- Align the top hole of the mounting tubes with the top holes in the headboard.
- Insert a 40mm hex drive bolt through each of the top holes and bottom holes and screw into each insert. Tighten with the Hex Allen wrench included in the kit.
- Slide the “L” portions of the Mounting tubes into the hollow ends of the main frame rails, at the head deck end.
- **FOR 80” BEDS:** Slide the mounting tubes in until the first tube hole lines up with the first rail hole. See sample below.
- **FOR 76” BEDS:** Slide the mounting tubes in until the first tube hole lines up with the second rail hole. See sample below.

2. FOOTBOARD INSTALLATION

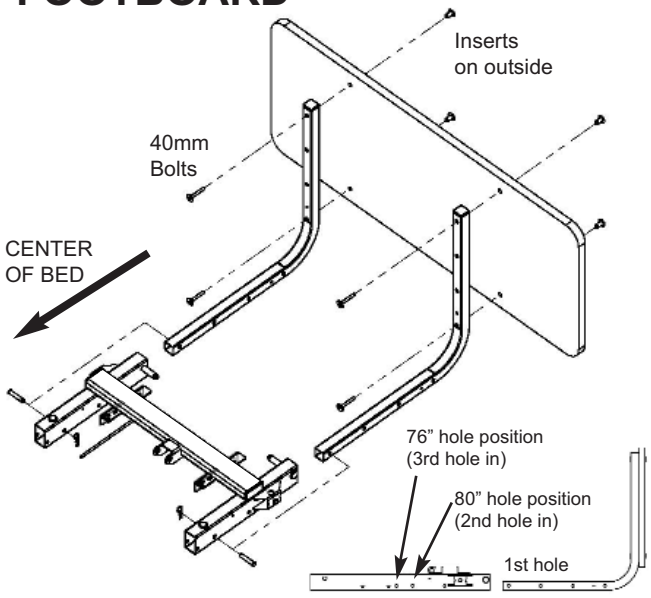
- The footboard comes with four pre-installed inserts - consider this the outside of the board.
- Position 2 mounting tubes on the inside of the footboard with “L” facing outward.
- Align the top hole of the mounting tubes with the top holes in the footboard.
- Insert a 40mm hex drive bolt through each of the top holes and bottom holes and screw into each insert. Tighten with the Hex Allen wrench included in the kit.
- Slide the “L” portions of the Mounting tubes into the hollow ends of the main frame rails, at the foot deck end.
- **FOR 80” BEDS:** Slide the mounting tubes in until the first tube hole lines up with the second rail hole. See sample below.
- **FOR 76” BEDS:** Slide the mounting tubes in until the first tube hole lines up with the third rail hole. See sample below.

HEADBOARD



IMPORTANT:
76” OR 80”HEADBOARD & FOOTBOARD POSITIONS MUST MATCH RETAINER & WALLSAVER POSITIONS. PLEASE SEE PAGES 11-12.

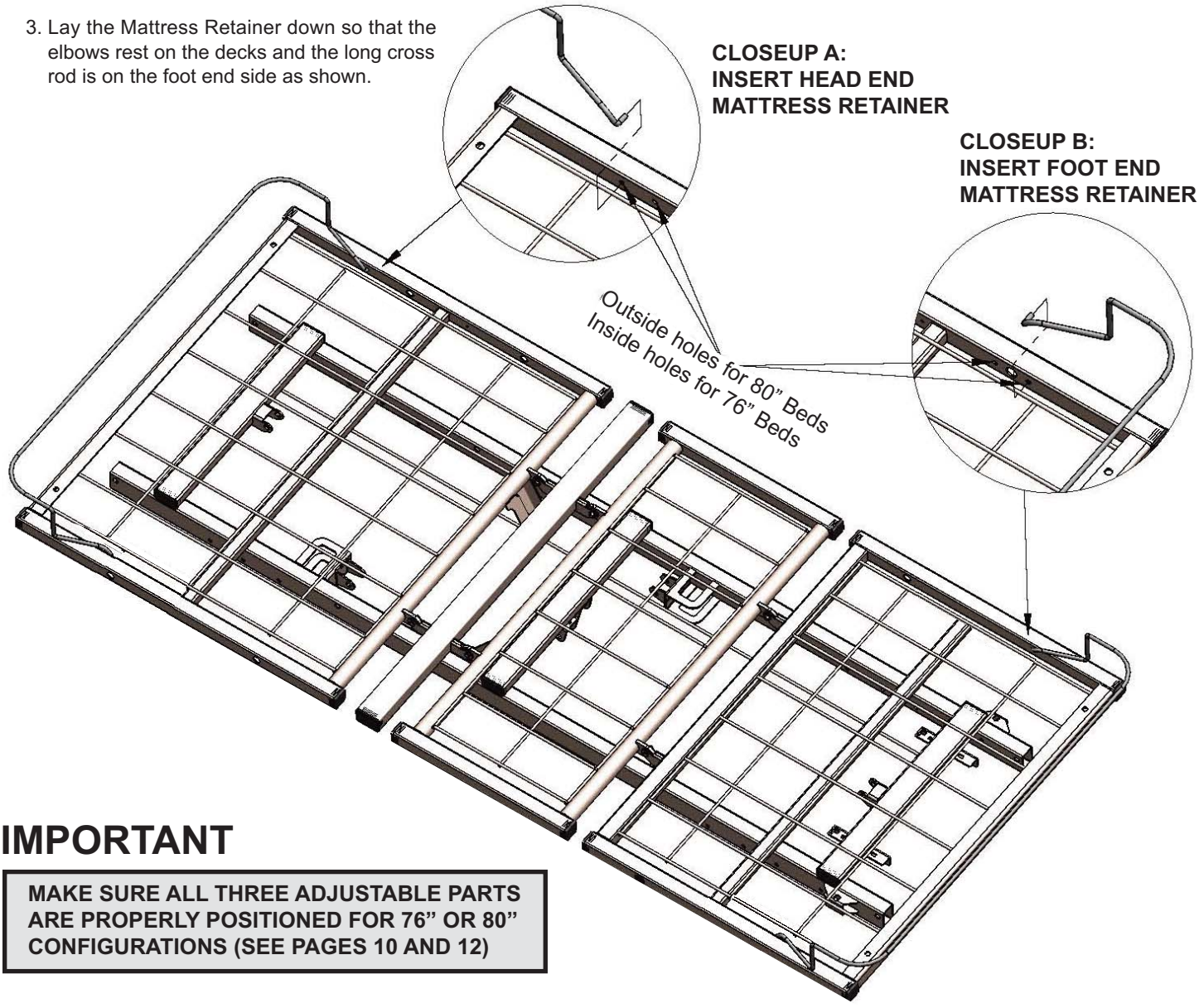
FOOTBOARD



NOTE: The first hole at the foot end is reserved for attaching the Optional 4” pan extension.

STANDARD MATTRESS RETAINER INSTALLATION
(Using 2 Retainers 999-0844-124)

1. Determine if you need to position your bed in an 80” or 76” configuration (80” outside holes; 76” inside holes - see Closeups A & B).
2. On the foot end, carefully squeeze the Mattress Retainer ends inward, toward the center of the retainer, and insert the ends into the proper holes (see Closeups A & B).
3. Lay the Mattress Retainer down so that the elbows rest on the decks and the long cross rod is on the foot end side as shown.
4. On the head end, carefully squeeze the Mattress Retainer ends inward, toward the center of the retainer, and insert the ends into the proper holes (see Closeups A & B).
5. Lay the Mattress Retainer down so that the elbows rest on the decks and the long cross rod is on the foot end side as shown.



IMPORTANT

MAKE SURE ALL THREE ADJUSTABLE PARTS ARE PROPERLY POSITIONED FOR 76” OR 80” CONFIGURATIONS (SEE PAGES 10 AND 12)

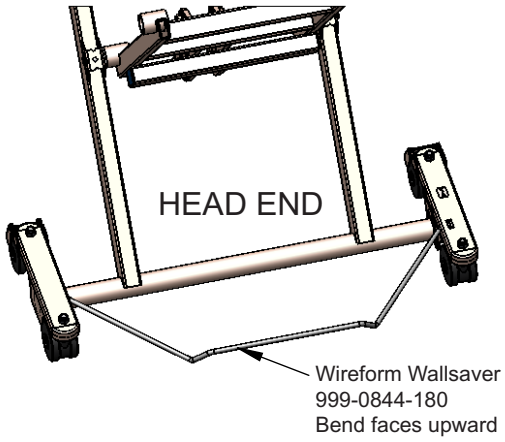
Be sure to use a mattress that is properly sized to fit the sleep deck, which will remain centered on the deck relative to State and Federal Guidelines. Use of an improperly fitted mattress could result in injury or death.

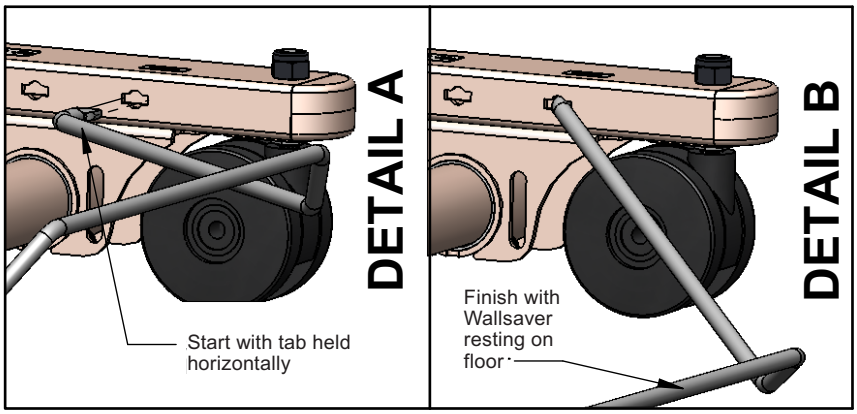
Use a properly sized mattress in order to minimize the gap between the side of the mattress and assist devices. This gap must be small enough to prevent resident/patient from getting his/her head or neck caught in this location.

STANDARD WIREFORM WALLSAVER INSTALLATION

WALLSAVER ASSEMBLY

1. Position the Wireform Wallsaver **(Part 999-0844-180)** with bent end facing upward and tab ends facing inward as shown at right.
2. Determine the position desired (See bottom of page).
3. Gently squeeze the tab ends of the wallsaver inward toward the center of the wallsaver and, holding the tabs parallel with the slots in the caster bases (See DETAIL A), slide the tabs into the slots while letting the wallsaver gently expand outward.
4. Turn the wallsaver downward until it rests on the floor (See Detail B).





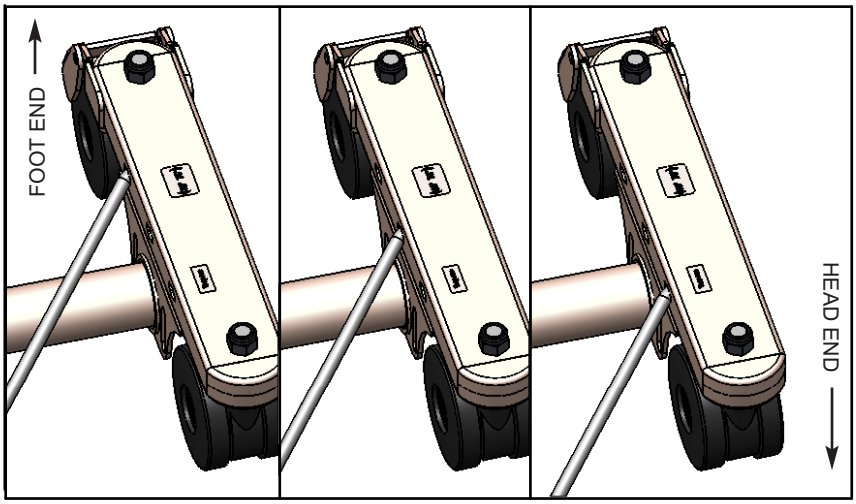
WALLSAVER REMOVAL

1. To remove or move the Wireform Wallsaver to a new position, raise the wallsaver off the floor until the end tabs are horizontal.
2. Squeeze the ends toward the center of the wallsaver until the end tabs slide out of the caster base slots.

WALLSAVER POSITIONS

1. The APS 9000 wallsaver features 3 positions for easy reconfiguration - 76”, 80”, and Trapeze.
2. For 76” beds, position the wallsaver ends in the caster base slots closest to the FOOT end of the bed. For 80” beds, position the wallsaver ends in the MIDDLE slots on the bases.
3. If you have an optional Trapeze unit on a 76” bed, position the wallsaver ends in the MIDDLE slots on the caster bases. For 80” beds position wallsaver in slots closest to HEAD.

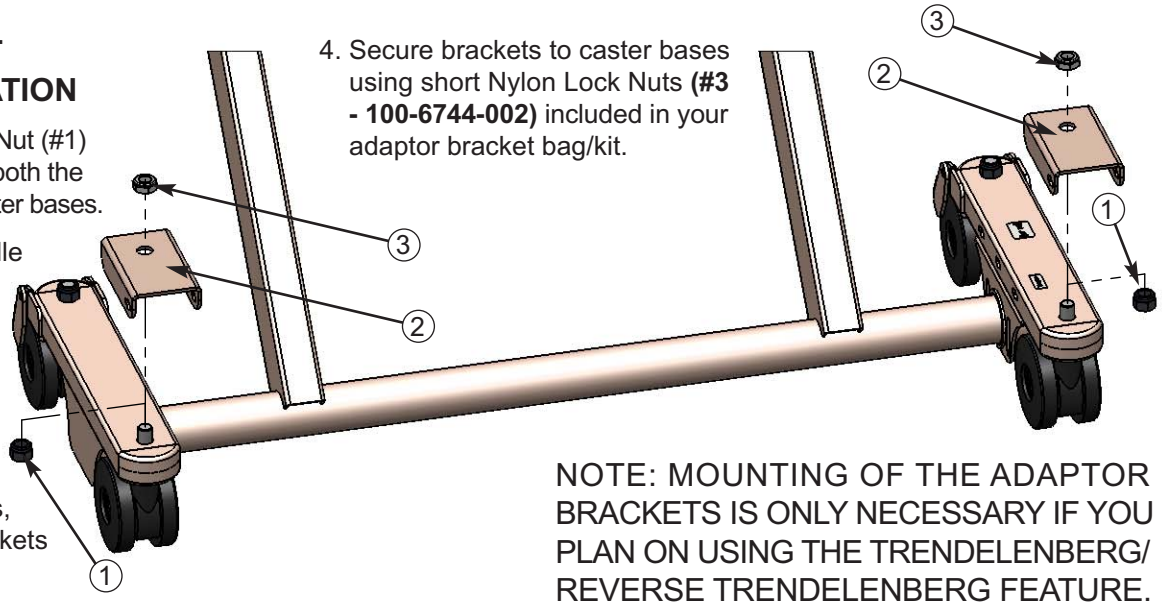
76” Bed Wallsaver Position w/o Trapeze | **76” Bed Wallsaver Position w/Trapeze or 80” Bed w/o Trapeze** | **80” Bed Wallsaver Position w/Trapeze**



OPTIONAL WALLSAVER ADAPTOR BRACKET INSTALLATION TO USE WITH TRENDELENBERG/REVERSE TRENDELENBERG FEATURE

STEP 1. BRACKET INSTALLATION

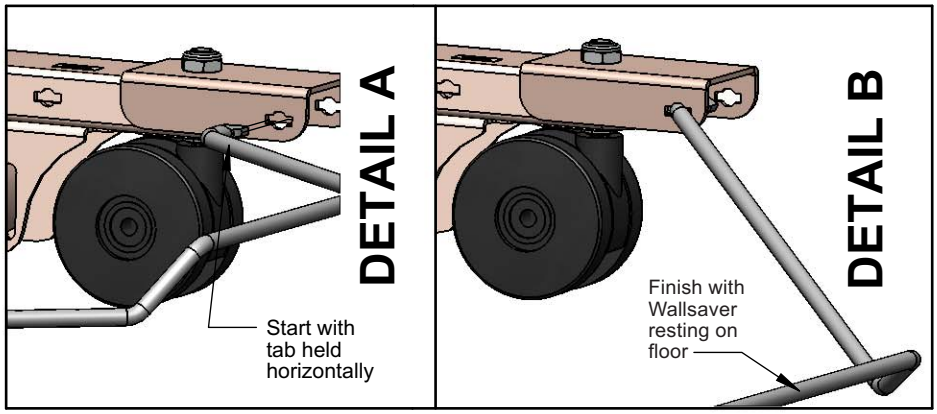
1. Remove the tall Lock Nut (#1) from the head end of both the right and left-hand caster bases.
2. Position the two saddle adaptor brackets **(#2 - 999-0831-002)** so that the ends with slots face away from the bases as shown.
3. Lower the brackets onto the caster bases, aligning holes in brackets with caster stems.
4. Secure brackets to caster bases using short Nylon Lock Nuts **(#3 - 100-6744-002)** included in your adaptor bracket bag/kit.



NOTE: MOUNTING OF THE ADAPTOR BRACKETS IS ONLY NECESSARY IF YOU PLAN ON USING THE TRENDELENBERG/ REVERSE TRENDELENBERG FEATURE.

STEP 2. WALLSAVER ASSEMBLY

1. Position the Wireform Wallsaver **(Part 999-0844-180)** with bent end facing upward and tab ends facing inward as shown at right.
2. Gently squeeze the tab ends of the wallsaver inward toward the center of the wallsaver and, hold -ing the tabs parallel with the slots in the caster bases (See DETAIL A), slide the tabs into the slots while letting the wallsaver gently expand outward.
3. Turn the wallsaver downward until it rests on the floor (See Detail B).

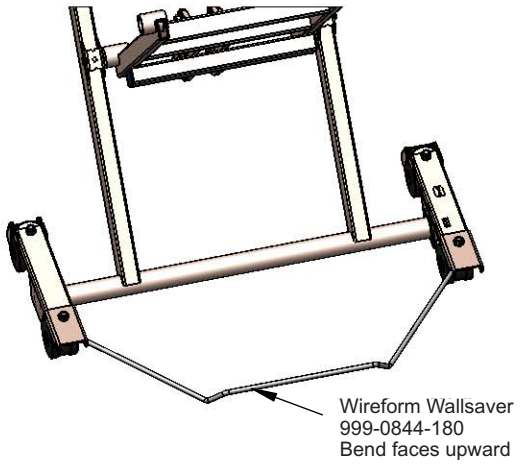


STEP 3. WALLSAVER REMOVAL

1. To remove or move the Wireform Wallsaver to a new position, raise the wallsaver off the floor until the end tabs are horizontal.
2. Squeeze the ends toward the center of the wallsaver until the end tabs slide out of the caster base slots.

IMPORTANT:

WALLSAVER END NEAREST THE WALL MUST FACE UPWARD AS SHOWN FOR WALLSAVER TO SEAT PROPERLY IN SLOTS.



PLUGGING IN THE FOOTBOARD NURSE/STAFF CONTROL

STEP 1 - ATTACHING THE FOOTBOARD

The APS 9000 bed features a Nurse/Staff Controller in the footboard, however the board is ordered separately with your bed because of the variety of board styles available. If ordered at the same time as the bed, the Staff Control Assembly and Shroud Cover will be pre-installed to the Footboard at the manufacturing factory.

STEP 2 - CONNECTING YOUR CABLES
Please refer to DETAIL A shown below.

a. If the Staff Control Assembly is not installed at the factory you will need to first attach it to the footboard.

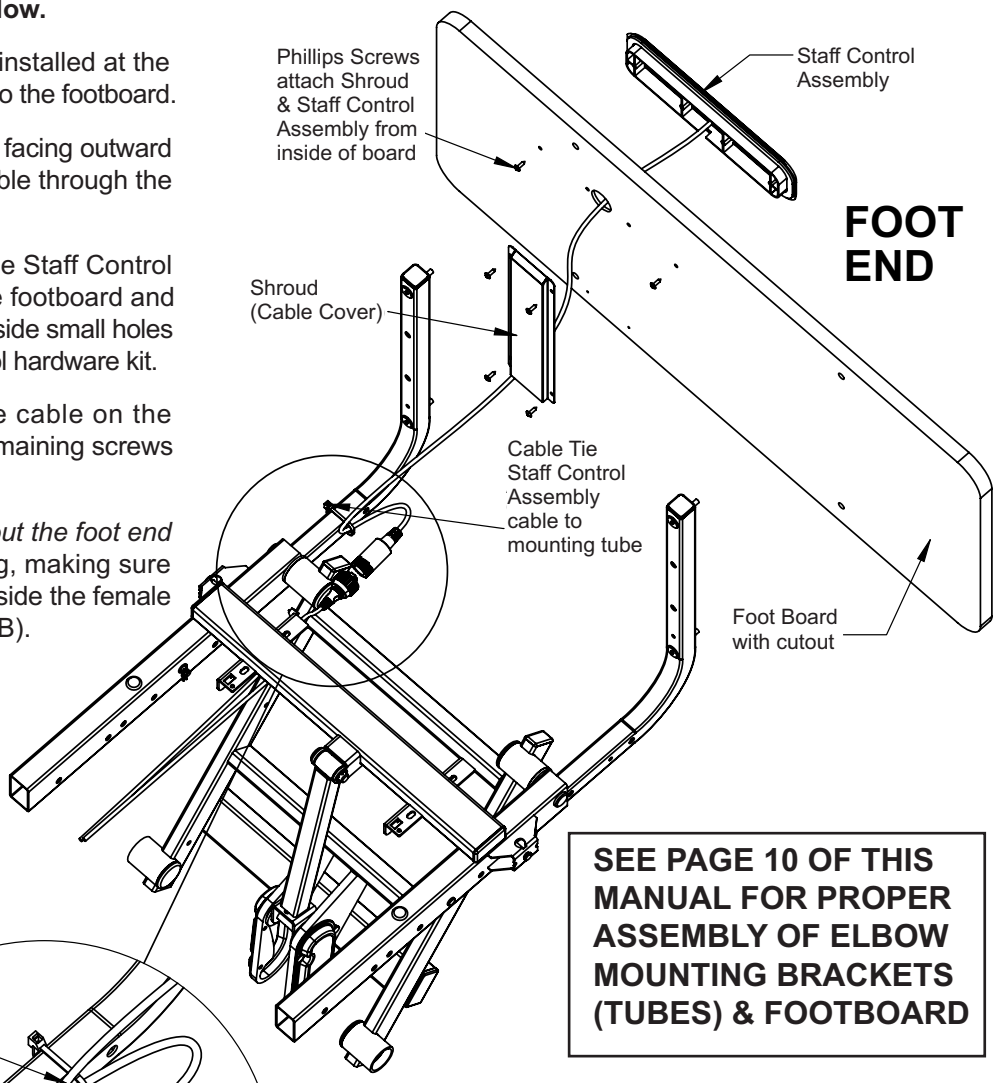
b. With the cutout side of the footboard facing outward as shown, insert the staff control cable through the large round hole.

c. With the text right-side-up, insert the Staff Control Assembly into the cutout slot on the footboard and attach to the board using the two outside small holes and two screws from your staff control hardware kit.

d. Attach the Shroud Cover over the cable on the inside of the board using the four remaining screws from your kit.

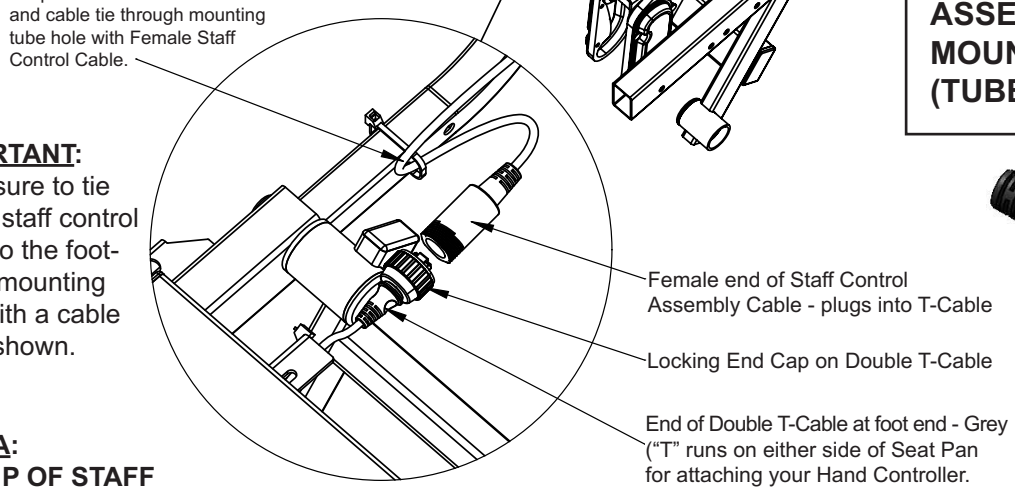
e. Insert the T-Cable end (*extending out the foot end with phone jack*) into the round plug, making sure the phone jack is seated correctly inside the female plug (arrow to arrow - See DETAIL B).

f. Screw on the round lock cap onto the Staff Control's female plug to secure (See DETAIL B).

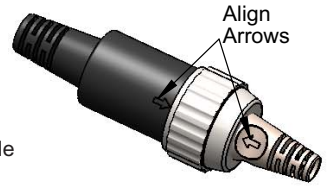

Phillips Screws attach Shroud & Staff Control Assembly from inside of board
Staff Control Assembly
FOOT END
Shroud (Cable Cover)
Cable Tie Staff Control Assembly cable to mounting tube
Foot Board with cutout

SEE PAGE 10 OF THIS MANUAL FOR PROPER ASSEMBLY OF ELBOW MOUNTING BRACKETS (TUBES) & FOOTBOARD

g. **<u>IMPORTANT</u>:** Make sure to tie off the staff control cable to the foot-board mounting tube with a cable tie as shown.

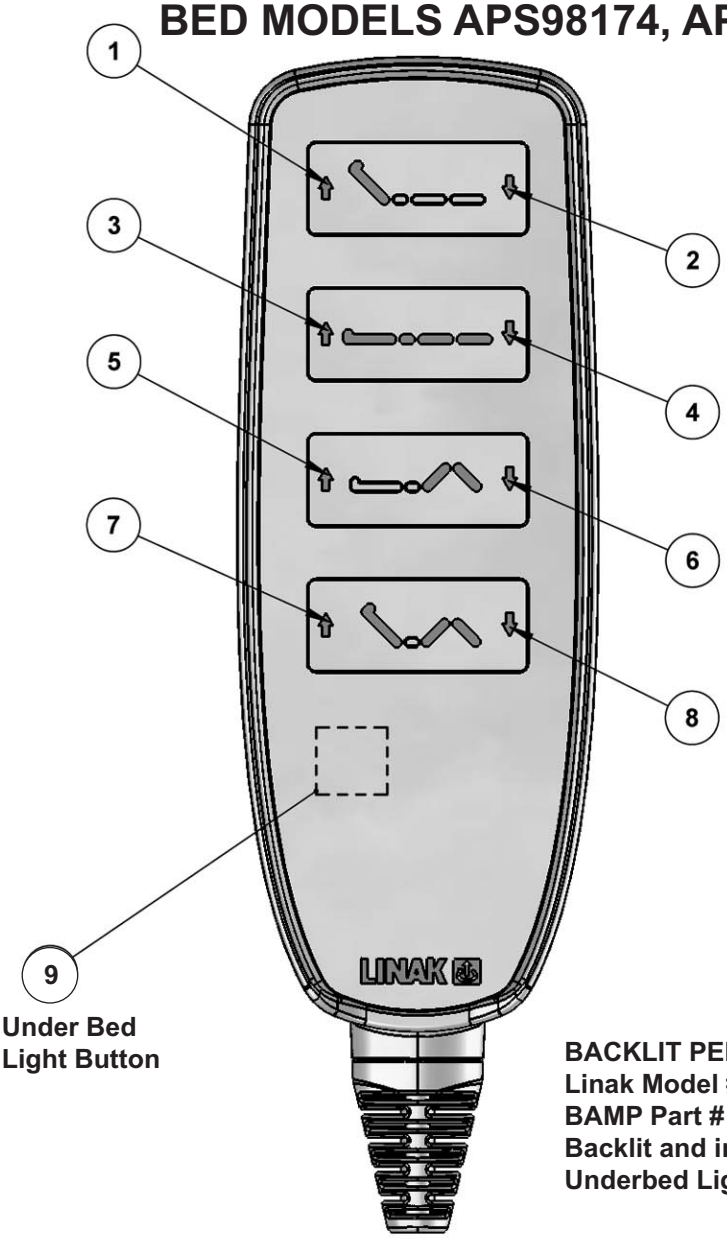

Loop Male Staff Control Cable and cable tie through mounting tube hole with Female Staff Control Cable.
Female end of Staff Control Assembly Cable - plugs into T-Cable
Locking End Cap on Double T-Cable
End of Double T-Cable at foot end - Grey ("T" runs on either side of Seat Pan for attaching your Hand Controller.

<u>DETAIL A</u>:
CLOSEUP OF STAFF CONTROL CABLE CONNECTION



<u>DETAIL B</u>:
MAKE SURE LOCK END CAPS ARE SCREWED ON SECURELY.

APS PENDANT/HAND CONTROLLER OPERATION
BED MODELS APS98174, APS981741 & APS981742



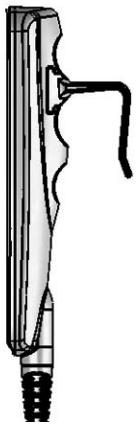
Under Bed Light Button

BACKLIT PENDANT	
1	HEAD DECK ANGLE UP BUTTON
2	HEAD DECK ANGLE DOWN BUTTON
3	HI/LO UP BUTTON (RAISE ENTIRE BED)
4	HI/LO DOWN BUTTON (LOWER ENTIRE BED)
5	KNEE & FOOT DECK ANGLE UP BUTTON
6	KNEE & FOOT DECK ANGLE DOWN BUTTON
7	SET TO CHAIR POSITION BUTTON
8	UNDO CHAIR POSITION BUTTON
9	OPTIONAL UNDERBED LIGHT BUTTON

OPERATION:

1. To angle the Head Deck upward, PRESS 1.
2. To angle the Head Deck downward, PRESS 2.
3. To raise the Bed Up horizontally, PRESS 3.
4. To lower the Bed Down horizontally, PRESS 4.
5. To angle the Knee/Foot Decks upward, PRESS 5.
6. To angle the Knee/Foot Decks downward, PRESS 6.
7. To put the Bed in the Chair position, PRESS 7.
8. To release the Bed from the Chair position, PRESS 8.
9. To turn the underbed light on or off PRESS THE LIGHT. BULB ICON near the bottom of the hand controller.

BACKLIT PENDANT
Linak Model #HB8545V3203-61
BAMP Part # 999-0806-301
Backlit and includes Underbed Light Button



Backlit Pendant includes removable attachment hook.

A Pendant holster also comes standard with the APS bed.

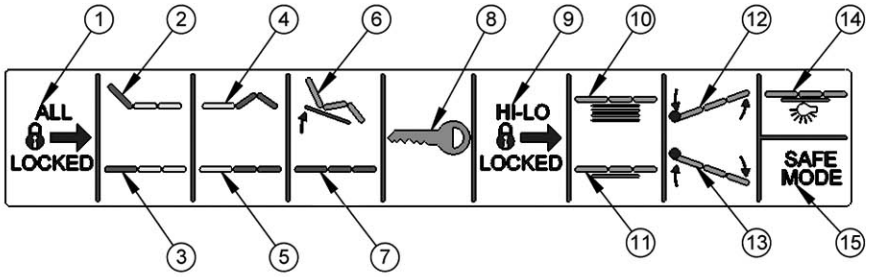
NOTE:

THE APS 9000 PENDANT CAN BE PLUGGED INTO THE T-CABLE PLUGS ON EITHER SIDE OF THE BED FOR EASY ACCESS. THE OPPOSITE SIDE OF THE T-CABLE SHOULD ALWAYS HAVE THE PROVIDED CAP ATTACHED FOR SAFETY.

THE TWO VERTICAL ENDS OF THE DOUBLE T-CABLE RUN TOWARD THE FOOT END OF THE BED, WITH ONE VERTICAL END PLUGGING DIRECTLY INTO THE CONTROL BOX (OR UNDERBED LIGHT BOX IF YOUR BED HAS THAT FEATURE) AND THE OTHER LONGER END RUNS ALONG THE TIE ROD AND EXTENDS OUT THE FOOT END AND PLUGS INTO YOUR STAFF/NURSE CONTROL CABLE.

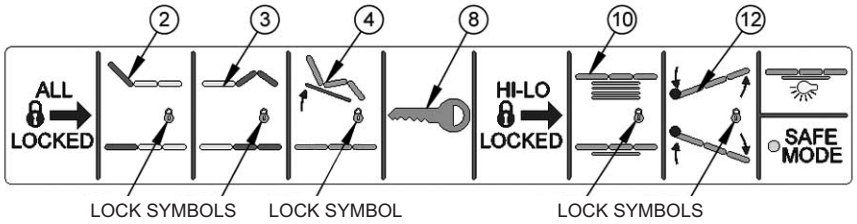
THE HAND CONTROLLER DOES NOT FEATURE ANY TRENDELENBERG OR REVERSE TRENDELENBERG BUTTONS. CONTROLS FOR THIS FEATURE ARE ONLY INCLUDED ON THE STAFF/NURSE CONTROLLER FOR OPTIMUM SAFETY FOR THE PATIENT.

BED OPERATIONS - NURSE/STAFF CONTROL PANEL



Press “Underbed Light” button (#14) to turn underbed light on or off.

“Safe Mode” (#15) LED light will glow green automatically once power cord is plugged in. Green light will blink intermittently for approximately 10 minutes. After 10 minutes of non-activity HI/LO Lock icons on the nurse/staff control panel will show orange (locked).



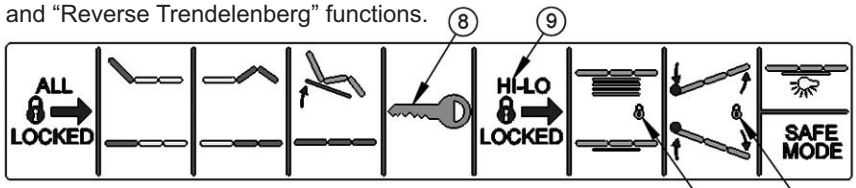
Press “Head”, “Knee”, or “Chair” and “Key” at the same time to unlock individual lock out functions.

1	ALL LOCKED BUTTON
2	HEAD DECK UP BUTTON
3	HEAD DECK DOWN BUTTON
4	KNEE & FOOT DECK UP BUTTON
5	KNEE & FOOT DECK DOWN BUTTON
6	CHAIR POSITION BUTTON
7	UNDO CHAIR POSITION BUTTON
8	KEY LOCK/UNLOCK BUTTON
9	HI/LO (T/TR) LOCKED BUTTON
10	HI/LO UP BUTTON
11	HI/LO DOWN BUTTON
12	TRENDELENBERG
13	REVERSE TRENDELENBERG
14	UNDERBED LIGHT BUTTON
15	SAFE MODE RELEASE BUTTON

LOCK OUT SINGLE FUNCTIONS
To individually lock out the “Head”, “Knee”, “Chair”, and “HI/LO” functions, press the appropriate top icon (#2, 3, 4, 10, or 12) button and the “Key” button at the same time. An orange LED lock symbol will appear under the related icon.

To “Unlock” any of the individual functions, press the top icon (#2, 3, 4, 10, or 12) and the “Key” Button (#8) simultaneously. LED lights will <u>not</u> show up.

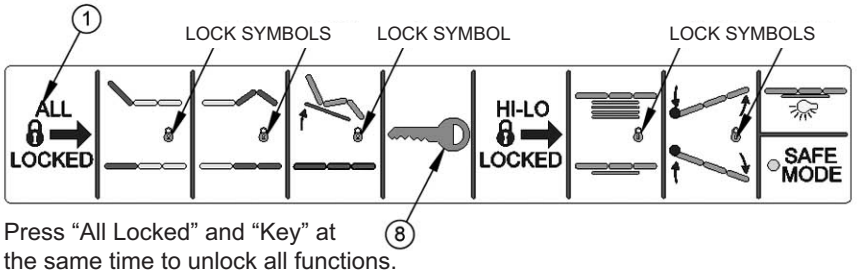
Press “HI/LO Locked” to lock out “HI/LO”, “Trendelenberg”, and “Reverse Trendelenberg” functions.



Press “HI/LO Locked” and “Key” at the same time to unlock all HI/LO lock out functions.

LOCK OUT HI/LO FUNCTIONS
To lockout the functions for raising and lowering the entire bed and tilting the bed for Trendelenberg positions, press the “HI/LO Locked” (#9) button. Orange LED lock symbols will appear under the HI/LO and Trendelenberg icons.

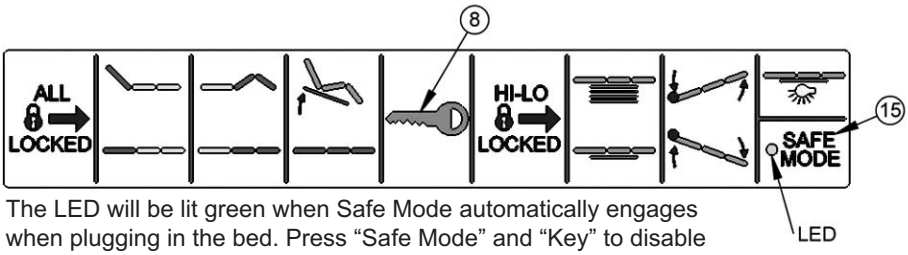
To “Unlock” all HI/LO functions, press the “HI/LO Locked” button (#9) and the “Key” button (#8) simultaneously. Orange LED lights will <u>not</u> show up.



Press “All Locked” and “Key” at the same time to unlock all functions.

LOCK OUT EVERYTHING
To lock out all functions, press the “All Locked” button (#1). Orange LED lock symbols will appear under the “Head”, “Knee”, “Chair”, “HI/LO”, and “Trendelenberg/Reverse Trendelenberg” icons.

To “Unlock” all functions, press the “All Locked” button (#1) and the “Key” button (#8) simultaneously. Orange LED lights will <u>not</u> show up.

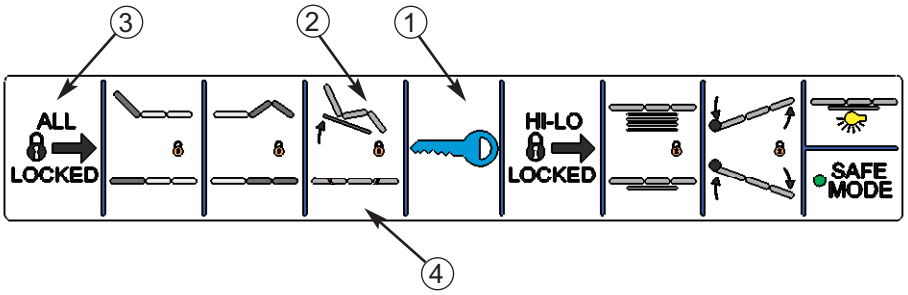


The LED will be lit green when Safe Mode automatically engages when plugging in the bed. Press “Safe Mode” and “Key” to disable the Safe Mode feature.

SAFE MODE:
Green light will show automatically when bed is plugged in and will blink intermittently during 10 minute “sleep mode”. After 10 minutes of lapsed time since the last function was used, the LED light shows green and HI/LO Lock icons will show orange.

To manually <u>disable</u> the function, hold the “Safe Mode” button (#15) and “Key” button (#8) at the same time. Green LED light will go out.

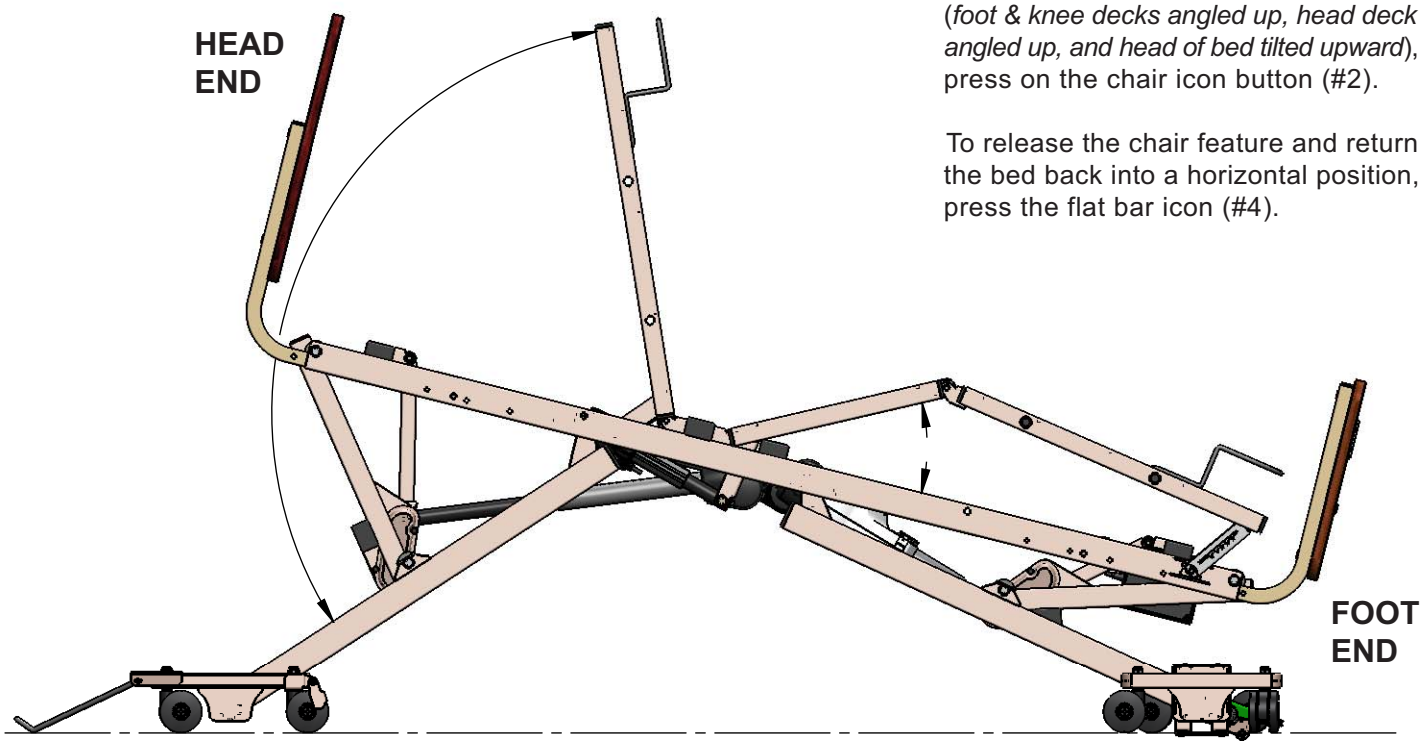
BED OPERATIONS - CHAIR POSITION

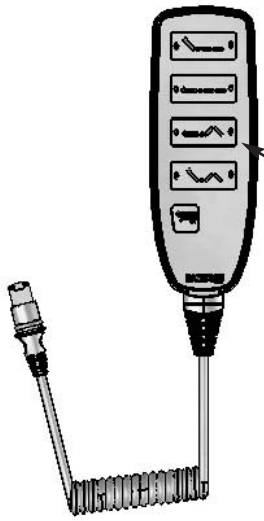


1. Make sure the Chair position on the staff control panel is not locked out (*orange lock icon*). To unlock, press the Key icon #1 and Chair icon #2 (or "All Locked" button #3) at the same time.

2. To move the bed to the Chair position (*foot & knee decks angled up, head deck angled up, and head of bed tilted upward*), press on the chair icon button (#2).

   To release the chair feature and return the bed back into a horizontal position, press the flat bar icon (#4).





The Chair feature can also be operated using the Pendant. (See page 15.)

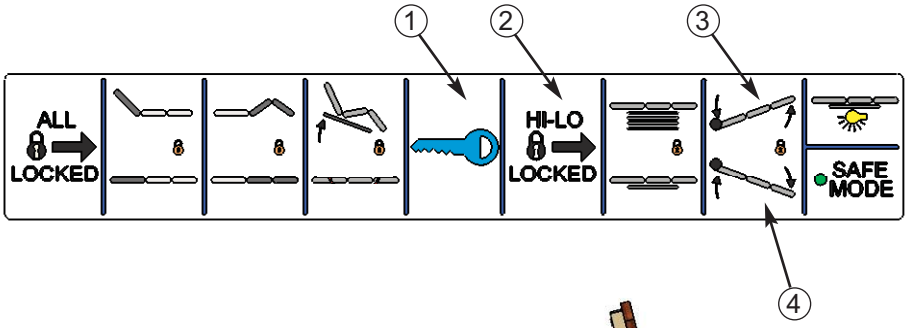
Up and Down Buttons for Chair Position

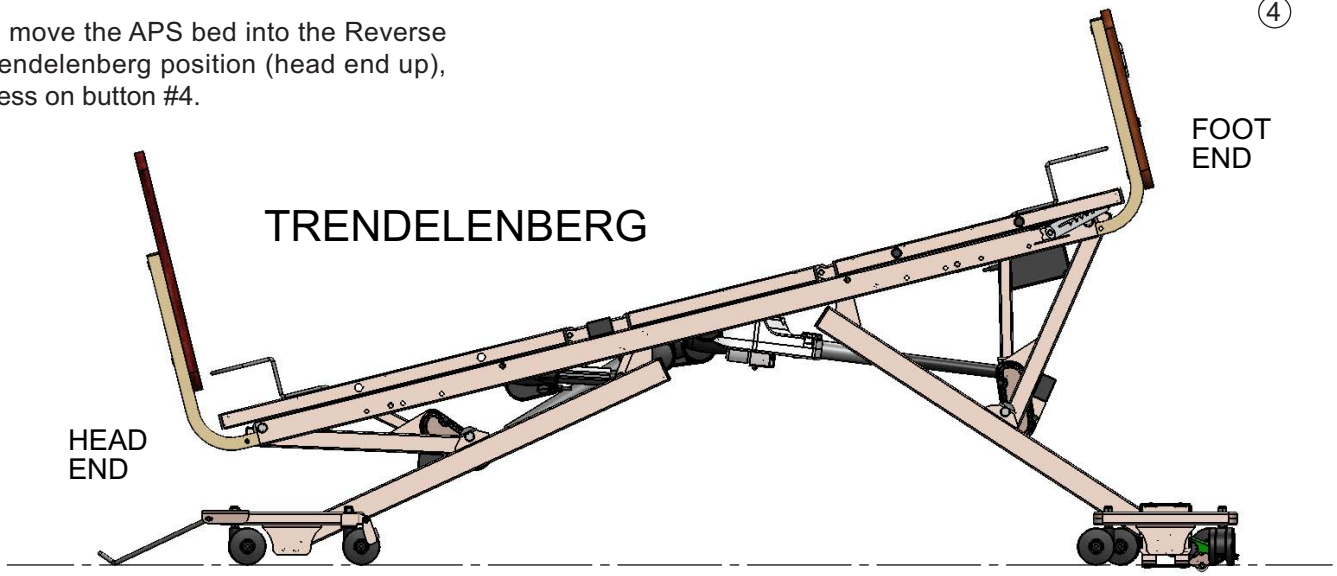
BED OPERATIONS - TRENDELENBERG/REVERSE TRENDELENBERG

1. Make sure the HI/LO function on the staff control panel is not locked out (*orange lock icon*). To unlock, press the Key icon #1 and HI/LO Locked button #2 at the same time.

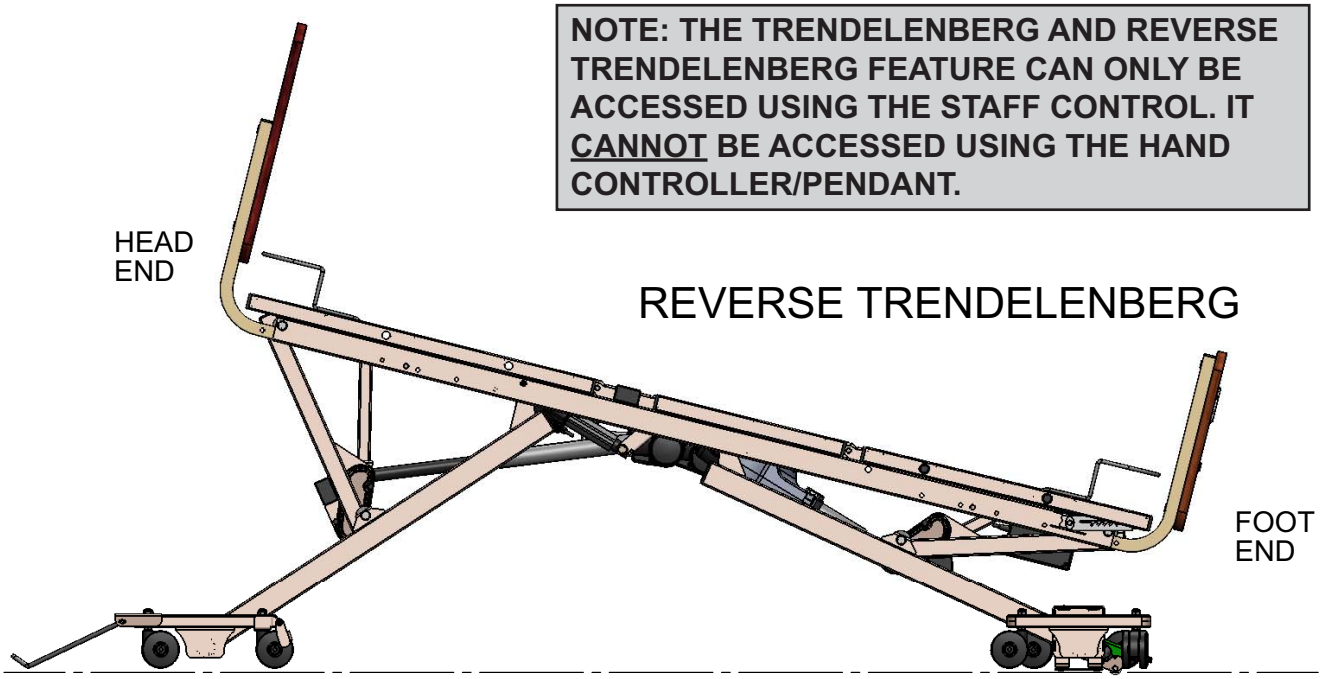
2. To move the bed to the Trendelenberg position (*foot end up*), press on button #3.

3. To move the APS bed into the Reverse Trendelenberg position (head end up), press on button #4.





NOTE: THE TRENDELENBERG AND REVERSE TRENDELENBERG FEATURE CAN ONLY BE ACCESSED USING THE STAFF CONTROL. IT CANNOT BE ACCESSED USING THE HAND CONTROLLER/PENDANT.



SECTION B

ASSIST DEVICES

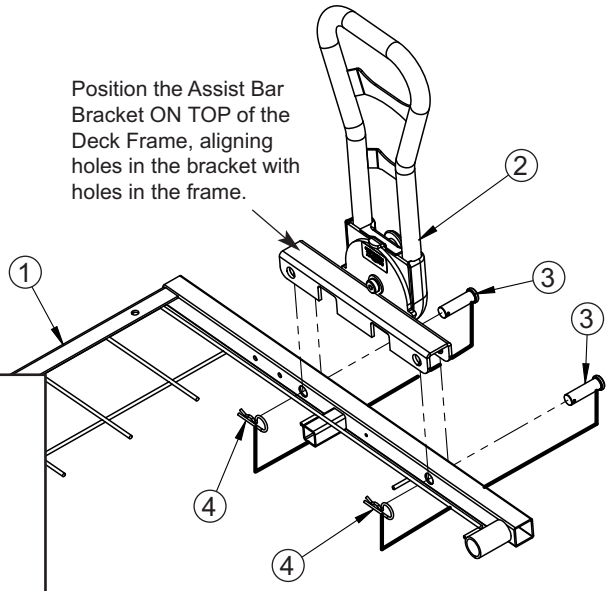
Model APS98174, APS981741,
and APS981742

OPTIONAL PIVOT ASSIST BAR INSTALLATION & OPERATION
KIT ZA85400 - (Sample shows bar positioned on left side of bed)

1. At the head end of the bed, position the Pivoting Assist Bar (#2) bracket over the Head Deck (#1) frame and align the two holes in the Assist Bar bracket with the two holes in the frame rail on either side of the head deck.

2. From the outside, insert the Clevis Pins (#3) through the holes in the pivot bracket and deck frame.

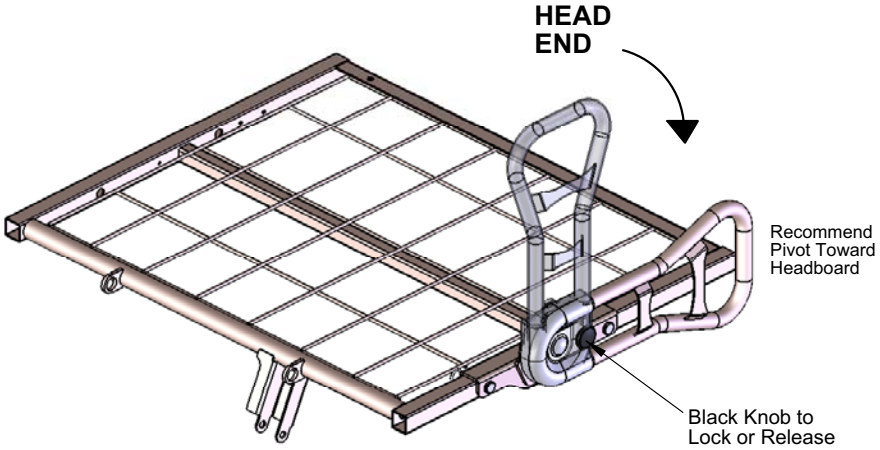
3. From the inside, insert a Hair Pin Clip (#4) through each of the small holes in the clevis pins.



PLEASE ORDER KIT # <u>ZA85400</u>. KIT INCLUDES ONE PIVOTING ASSIST BAR ASSEMBLY AND TWO LANYARD ASSEMBLIES WITH CLEVIS PINS AND HAIR PIN CLIPS. (*A STATIONARY ASSIST BAR IS ALSO AVAILABLE AS AN OPTION - KIT # ZA85000*).

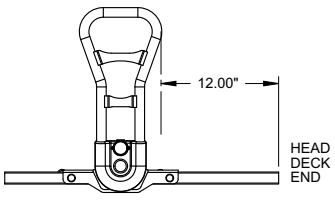
THE ASSIST BAR CAN BE POSITIONED ON EITHER THE RIGHT SIDE OR LEFT SIDE OF THE HEAD DECK. **IT IS NOT OFFERED FOR THE FOOT END OF THE BED.**

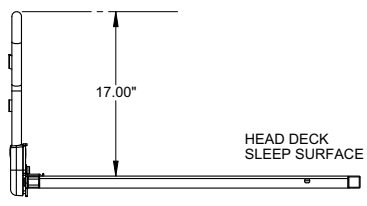
PIVOTING ASSIST BAR OPERATION

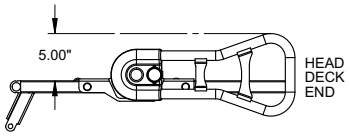


1. To release the pivoting assist bar from its vertical lock position, hold onto the top of the bar with one hand and slightly pull out the black knob on the outside of the pivot assembly with the other hand to release the locking mechanism. For ease of patient access, it is recommended that you pivot the rail toward the headboard until it stops and rests in place.

2. To set the assist bar back to its upright locked position, grab the top of the assist bar with one hand and pivot the assembly upward until the black knob mechanism snaps into place, locking the assist bar vertically.







⚠ FOR OPTIMUM SAFETY, MAKE SURE FINGERS ARE CLEAR OF THE SIDES OR UNDERNEATH THE PIVOTING ASSEMBLY WHEN POSITIONING THE ASSIST BAR UP OR DOWN.

⚠ PLEASE MAKE SURE THE PIVOTING ASSIST BAR IS ALWAYS IN THE FULL, VERTICAL, LOCKED POSITION WHENEVER RESIDENT/PATIENT IS LEFT UNATTENDED.

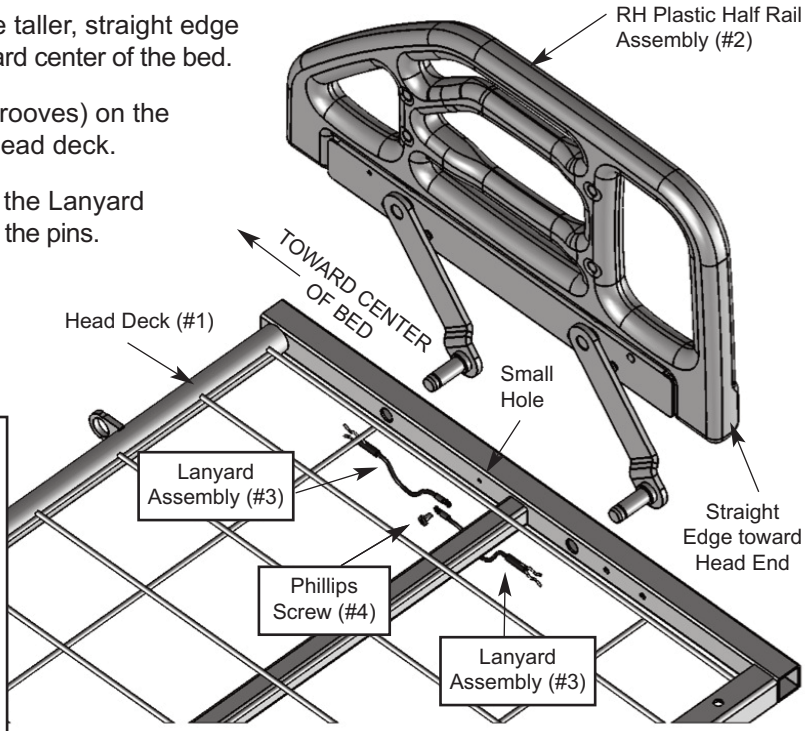
⚠ POWERED AIR MATTRESS SURFACES MAY POSE A RISK OF ENTRAPMENT. PRIOR TO USE, ENSURE THE THERAPEUTIC BENEFITS OUTWEIGH THE RISK OF ENTRAPMENT.

OPTIONAL PLASTIC HALF RAIL INSTALLATION & OPERATION
KIT ZA84200 - (Sample shows rail positioned on right side of bed)

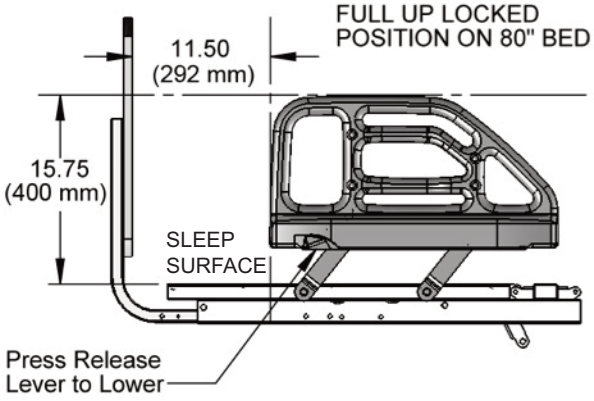
1. Position the Plastic Half Rail (#2) as shown, with the taller, straight edge toward the head end of the bed and arms angled toward center of the bed.
2. From the outside, insert the two welded pins (with grooves) on the rail arms into the two large holes in the side of the head deck.
3. From the inside, insert the metal hair pin clip end of the Lanyard Assembly (#3) onto the exposed grooves at the end of the pins.
4. Position the other terminal end of the Lanyard Assemblies (#3) over the small hole on the inside of the deck frame. Secure with a small threaded Phillips Screw (#4).

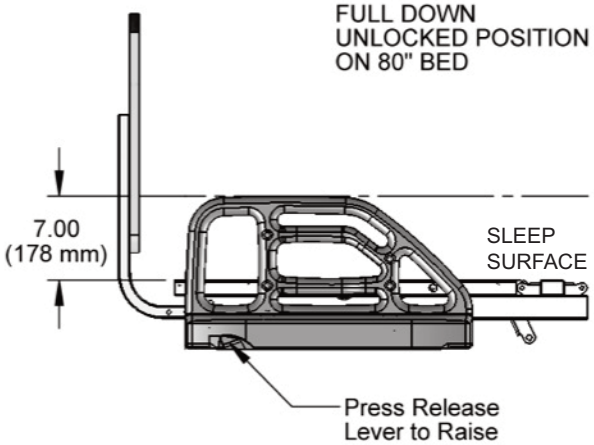
PLEASE ORDER PLASTIC RAIL KIT #ZA84200, WHICH INCLUDES A RIGHT-HAND AND LEFT-HAND HALF RAIL, FOUR LANYARD ASSEMBLIES, AND 2 PHILLIPS SCREWS (OR 2 OPTIONAL HEX HEAD SCREWS). ORDER BAG # 999-0842-905 FOR JUST THE REPLACEMENT HARDWARE.

THE PLASTIC RAIL CAN BE POSITIONED ON EITHER THE HEAD OR FOOT DECKS FOR 80" BEDS. **THEY SHOULD ONLY BE PUT ON THE HEAD END FOR 76" BEDS.**



PLASTIC HALF RAIL OPERATION



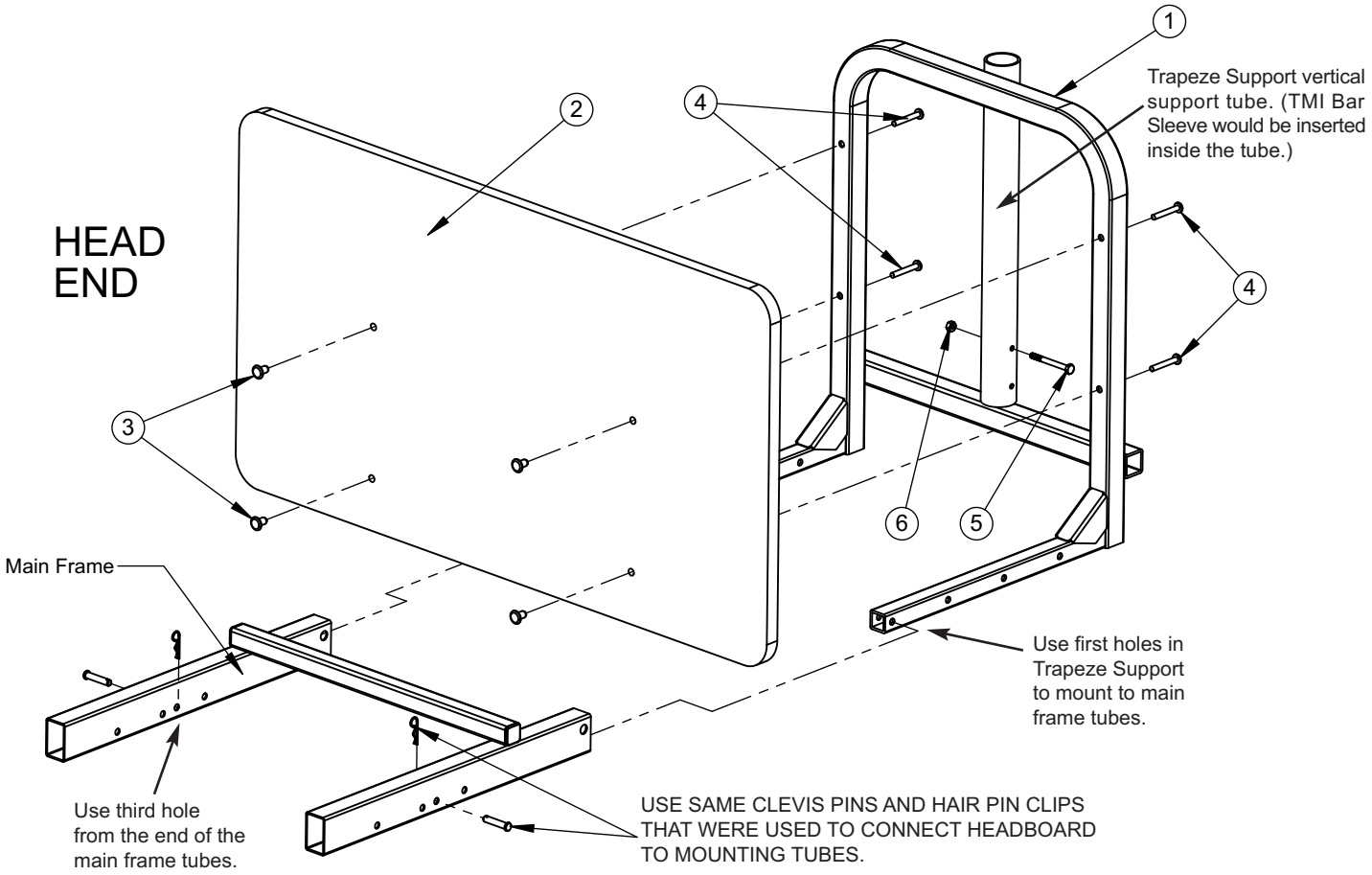


⚠ TO AVOID PINCHING FINGERS, HOLD THE HALF RAIL FROM THE TOP WITH ONE HAND AND CAREFULLY DEPRESS THE BLACK RELEASE LEVER WITH THE OTHER. MAKE SURE THERE ARE NO OBJECTS IN THE WAY THAT MAY HINDER THE FULL MOVEMENT OF THE RAIL.

⚠ FOR OPTIMUM SAFETY, PLEASE MAKE SURE RAIL IS ALWAYS IN ITS "FULL UP LOCKED" POSITION WHEN LEAVING THE RESIDENT/ PATIENT UNATTENDED TO AVOID POSSIBLE INJURY.

⚠ POWERED AIR MATTRESS SURFACES MAY POSE A RISK OF ENTRAPMENT. PRIOR TO USE, ENSURE THE THERAPEUTIC BENEFITS OUTWEIGH THE RISK OF ENTRAPMENT.

OPTIONAL TRAPEZE SUPPORT INSTALLATION
(The Trapeze Support is attached to the head section of the bed.)
Please Order Kit Number ZA79000


1
Trapeze Support vertical support tube. (TMI Bar Sleeve would be inserted inside the tube.)
2
4
HEAD END
4
3
6
5
Main Frame
Use first holes in Trapeze Support to mount to main frame tubes.
Use third hole from the end of the main frame tubes.
USE SAME CLEVIS PINS AND HAIR PIN CLIPS THAT WERE USED TO CONNECT HEADBOARD TO MOUNTING TUBES.

1. Begin by removing the headboard panel assembly (#2), if previously assembled to the bed, by pulling out the two Clevis Pins and two Hair Pin Clips that attach the main frame tubes to the headboard's mounting tubes. Set all pins aside for later use.

2. Detach the headboard panel from the mounting tubes by unscrewing the four 40mm Allen Head Bolts that hold the board to the tubes (these will be replaced with the longer Phillips Head Pan Screws from the trapeze adaptor hardware bag). Do not remove the (4) four 1/4-20 inserts (#3) from the board. They will be used again to mount the board to the trapeze support.

3. Assemble the Trapeze Support (#1) to the main frame tubes using the two Clevis Pins and Hair Pin Clips you removed in Step 1. **The first holes in the Trapeze tubes must line up with the third hole from the end in the main frame tubes as shown.**

4. Insert the 1/4-20 x 2.50" Carriage Bolt (#5) into the vertical support as shown and fasten with a 1/4-20 Hex Head Lock Nut (#6). Both parts should be in the hardware bag.

5. Assemble the headboard to the inside of the Trapeze Support so that the side of the headboard with the inserts is facing away from the Trapeze Support. From the outside, insert the (4) four 1/4-20 x 1.75" long Machine Screws (#4) from the hardware bag through the holes in the Trapeze Support, screwing them into the inserts in the headboard.

6. **OPTIONAL - FOR TMI TRAPEZE BAR WITH SLEEVE:** Insert the Sleeve into the vertical support with the slot on the bottom. Rotate the sleeve until it falls into place over the carriage bolt you inserted in Step 4. This will lock it into the proper position. **(NOTE: The top of the Sleeve should sit flush with the top of the vertical support on the Trapeze Support Adaptor.)**

SECTION C

Mechanical & Electrical Information

APS 9000 MECHANICS

NOTE: All dimensions are in a range of +/- .25 inches

- Overall Bed Length (with brds & wallsaver) . . 82”/86”
- Overall Bed Width (with boards) . . . . . 36.00”
- Maximum Height* . . . . . 30.00”
- Minimum Height* . . . . . 7.00”
- Maximum Head/Back Deck Angle . . . . . 70°
- Maximum Knee/Foot Deck Angle . . . . . 30°
- Maximum Safe Working Load . . . . . 600 lbs.
  WITH WEIGHT EVENLY DISTRIBUTED
  - includes bedding, resident, support surface, and all accessories.
- Mass of bed (without assist devices or boards) = 204 lbs.

* Bed height calculated from floor surface to top of sleep deck.

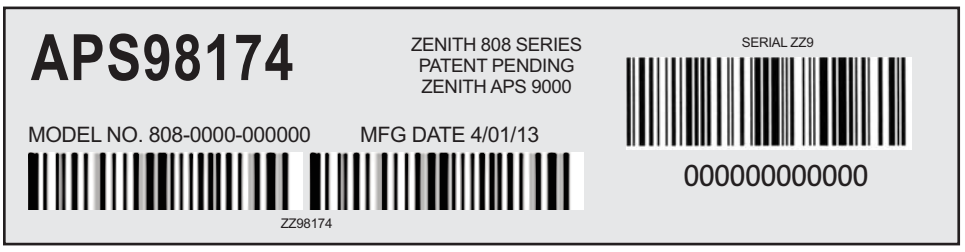
APS 9000 ELECTRICAL

- Power/Frequency . . . . . 120 Volt/ 50/60 Hz
- Output Rating 12/33V IPX4
- Overall Movement Draw . . . . . 4.50 Amps
- Classification . . . . . Class I, Type B
- Electrical Cord . . . . . #18 AWG 3 Conductor Type SJT
- Mode of Operations . . . . . .10% Max. Duty Cycle 2 minutes on/18 minutes off
- Battery Backup Option 1 . . . . 120V External Battery Pack and Charger

  Pack & Charger purchased separately as an accessory.
- Battery Backup Option 2 . . . . 120V Mounted Battery

  Pack is mounted to the bed frame - no charger needed.

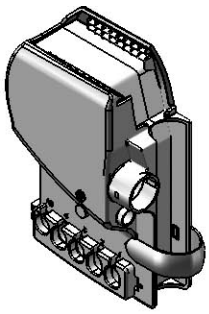
TYPICAL APS 9000 BED IDENTIFICATION LABELS with Grounded Electrical Cable



Bed labels are an important part of identifying the bed’s make and model when ordering replacement parts. The Serial Number is essential if you are claiming parts or service under warranty. These helpful labels can be located on the main frame rails, immediately below the sleep decks on either side of the bed.

Please have this IMPORTANT information ready when calling our customer service or technical support staff at 800-365-2338; it will allow us to better assist you and quickly answer your questions and concerns.

APS 9000 SERIES ELECTRICAL COMPONENTS (LINAK)

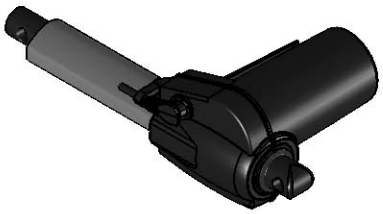


Control/Junction Box
Part # 999-0831-300
Quantity = 1

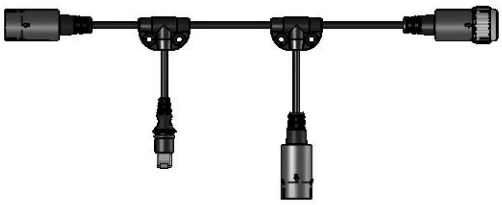
Power Cable plugs into side port (part listed at bottom)

MODEL APS9817406
PENDANT:
Part # 999-0806-301
Quantity = 1

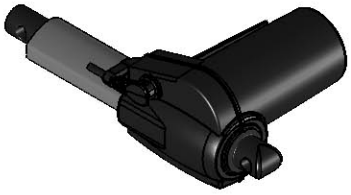
Bed also includes Pendant Holster
Part # 999-0791-000
Quantity = 1



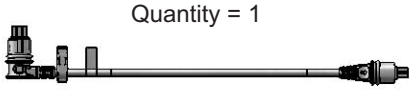
Head Motor/Actuator
Part # 999-0822-052
Quantity = 1



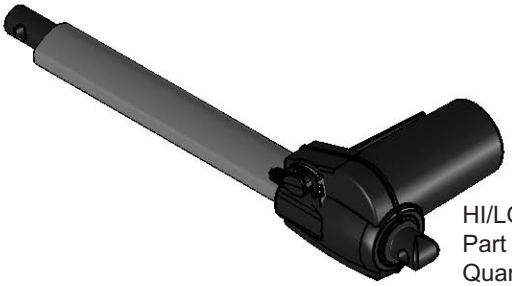
Double “T” Cable
Part # 999-0806-200
Quantity = 1



Foot Motor/Actuator
Part # 999-0822-053
Quantity = 1



Motor Cable (Hd & HI/LO)
Part # 999-0806-203
Quantity = 3



HI/LO Motor/Actuator
Part # 999-0831-051
Quantity = 2

Motor Cable (Ft.)
Part # 999-0806-202
Quantity = 1

Battery Backup Cable
Part # 999-0831-200
Quantity = 1

STANDARD:
3 Prong Power Cable
Part # 999-0775-208
Quantity = 1

OPTIONAL UNDERBED LIGHT
(APS981741 or -2 Models Only)

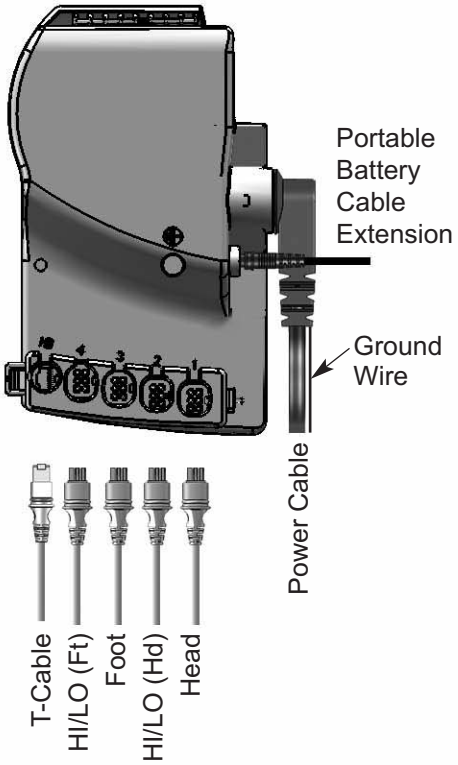
Underbed Light Adaptor Cable
Part # 999-0806-212
Quantity = 1

Underbed Light
Part # 999-0806-220
Quantity = 1

DO NOT use unauthorized parts, accessories, or adaptors other than those specified/authorized by GF Health Products, Inc. DO NOT open assemblies such as the Actuators, Hand Control, or Control Box. If unauthorized personnel perform work on these components, the manufacturer’s warranty becomes void. NEVER operate the bed if a Power Cord or Plug is damaged or not working properly. Contact qualified Service Personnel for examination and repair. Always unplug the Power Cord when performing any maintenance on the bed.

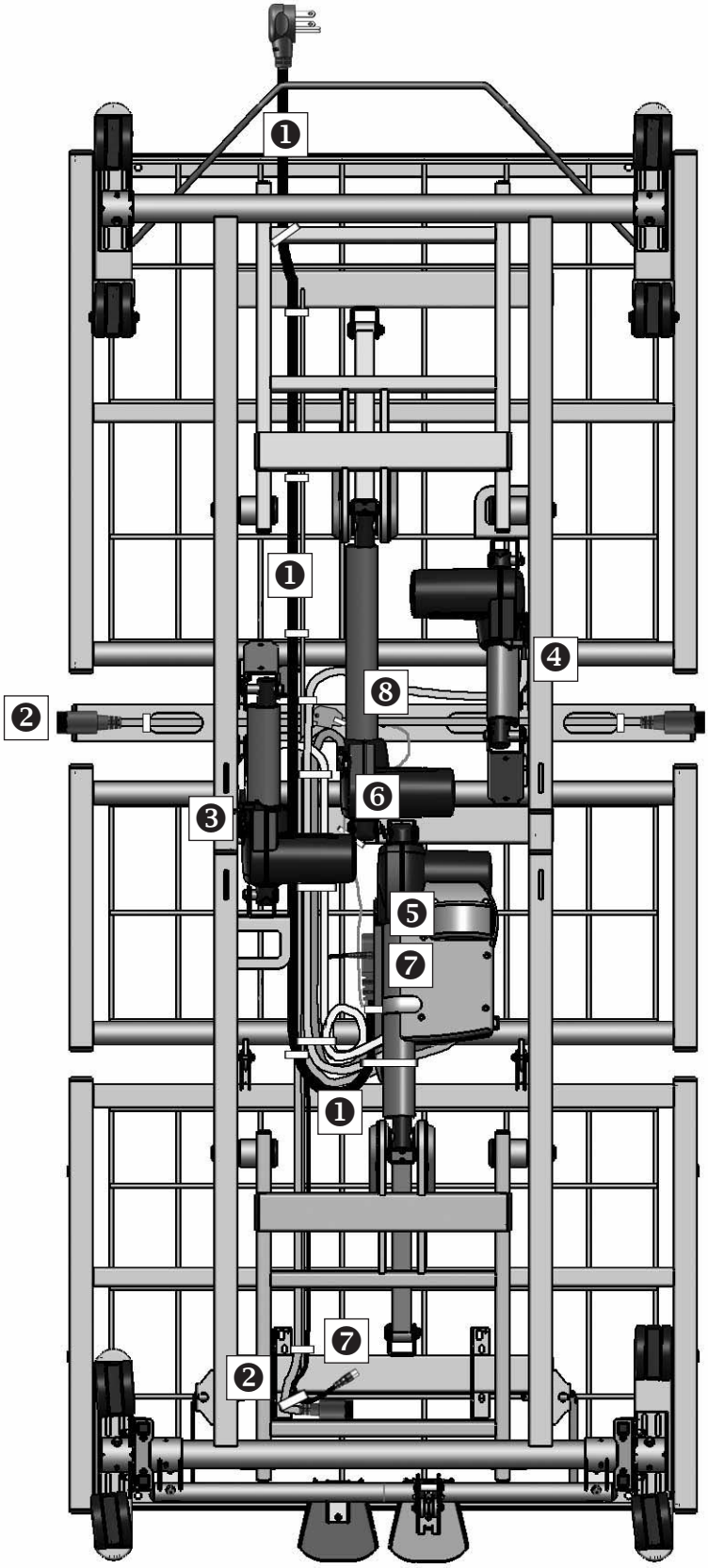
APS 9000 SERIES ELECTRICAL CABLING - MODEL APS98174

❶ POWER CABLE
❷ T-CABLE
❸ HEAD CABLE
❹ FOOT CABLE
❺ HI/LO CABLE (FOOT)
❻ HI/LO CABLE (HEAD)
❼ BATTERY BACKUP CABLE
❽ GROUND WIRE



T-Cable (HB)
HI/LO (Ft) - Port 4
Foot - Port 3
HI/LO (Hd) - Port 2
Head - Port 1

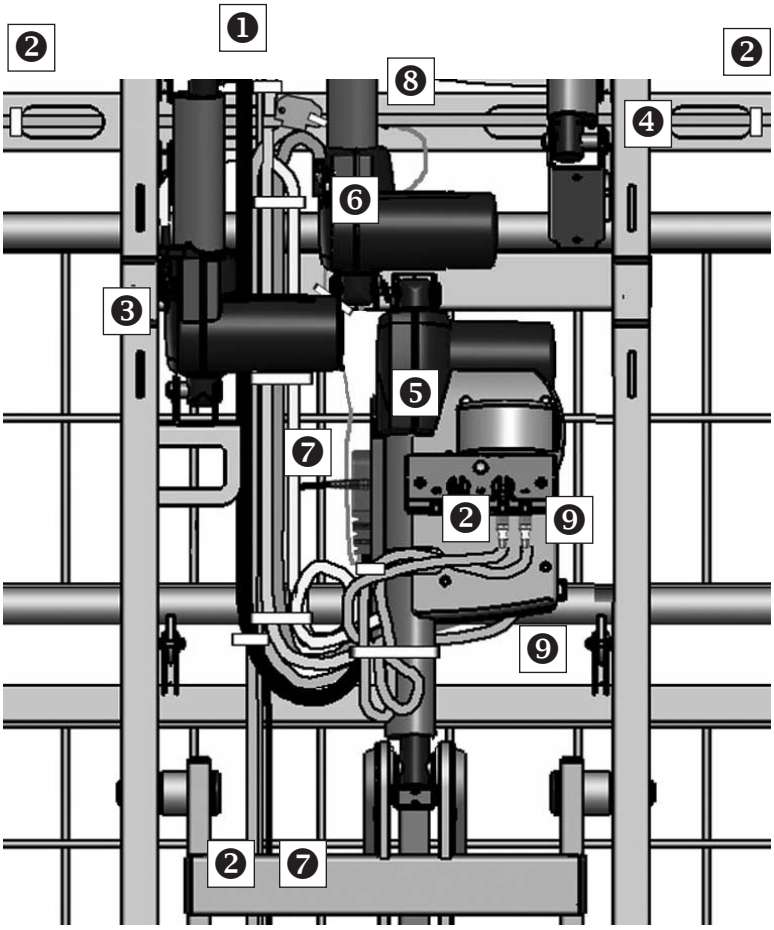
Power Cable &
Battery Cable -
Side of Control Box

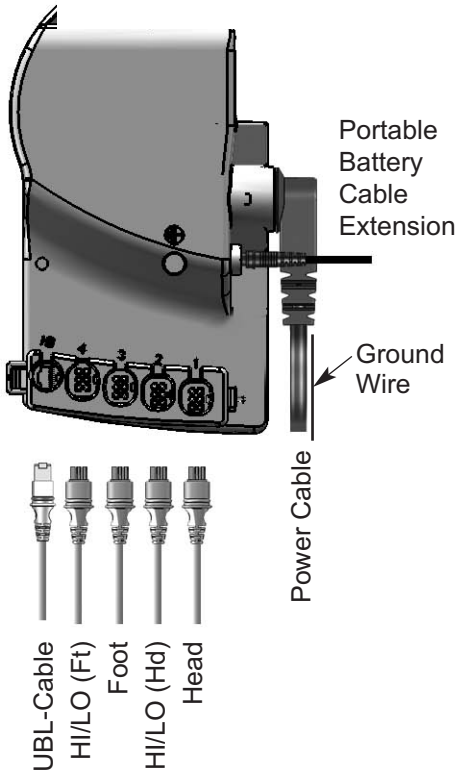


APS 9000 SERIES ELECTRICAL CABLING - MODEL APS981741

❶ POWER CABLE
❷ T-CABLE
❸ HEAD CABLE
❹ FOOT CABLE
❺ HI/LO CABLE (FOOT)
❻ HI/LO CABLE (HEAD)
❼ BATTERY BACKUP CABLE
❽ GROUND WIRE
❾ UNDERBED LIGHT CABLE (UBL)

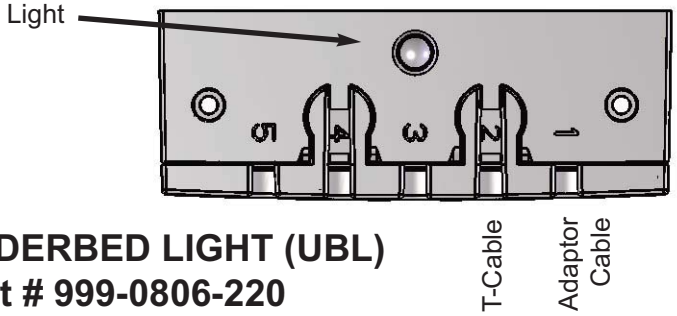
NOTE: Cabling for Beds with Underbed Light feature is identical to Standard APS beds, except that the T-Cable plugs into Port 2 in the Underbed Light Box and an extra Adaptor Cable is plugged into Port 1 on the Underbed Light Box and the HB Port in the Control Box.





T-Cable - Port 2 in Underbed Light Box
HI/LO (Ft) - Port 4 in Control Box
Foot - Port 3 in Control Box
HI/LO (Hd) - Port 2 in Control Box
Head - Port 1 in Control Box

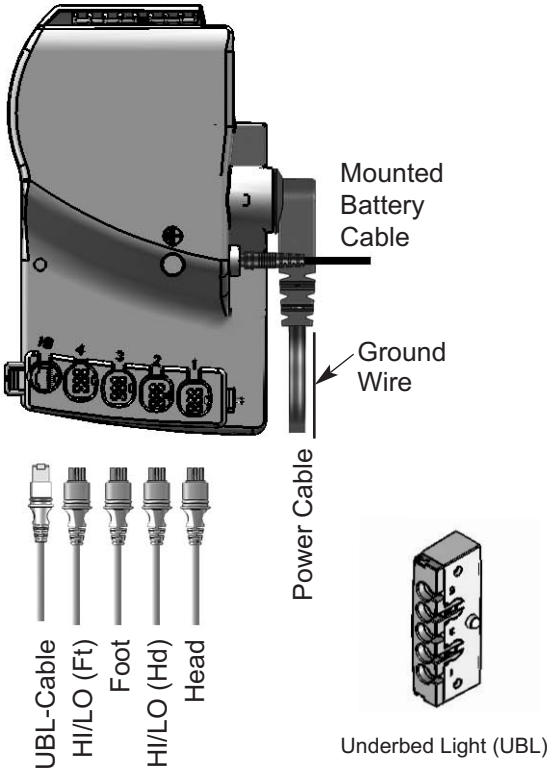
Power Cable &
Battery Cable -
Side of Control Box



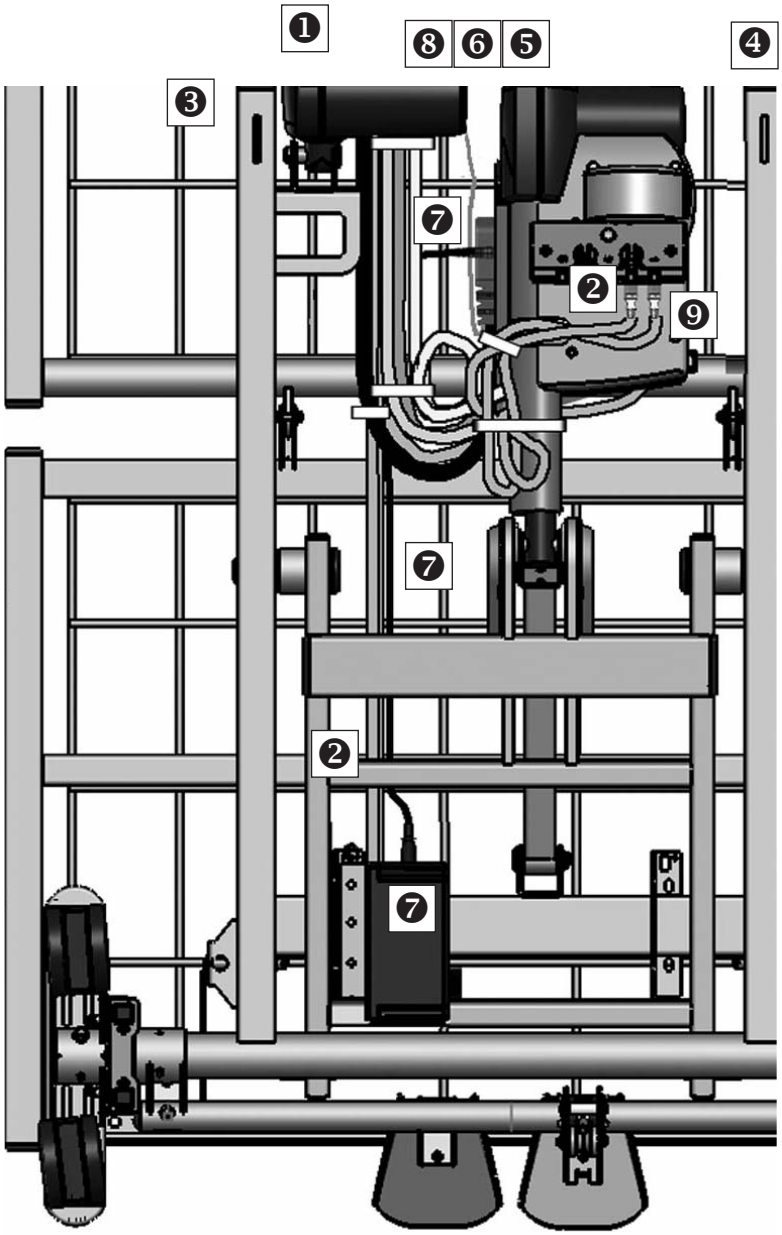
UNDERBED LIGHT (UBL)
Part # 999-0806-220
(please also order adaptor cable 999-0806-212)

APS 9000 SERIES ELECTRICAL CABLING - MODEL APS981742

❶ POWER CABLE
❷ T-CABLE
❸ HEAD CABLE
❹ FOOT CABLE
❺ HI/LO CABLE (FOOT)
❻ HI/LO CABLE (HEAD)
❼ BATTERY BACKUP CABLE
❽ GROUND WIRE
❾ UNDERBED LIGHT CABLE (UBL)



Underbed Light (UBL)



NOTE: Cabling for Beds with Underbed Light and Mounted Battery Backup features are identical to Standard APS beds, except that the T-Cable plugs into Port 2 in the Underbed Light Box and an extra Adaptor Cable is plugged into Port 1 on the Underbed Light Box and the HB Port in the Control Box.

A Battery Cable runs from the Control Box directly to an external Battery Pack at the foot end.

MOUNTED BATTERY OPTION
999-0831-003

SECTION D

SERVICE/REPLACEMENT PARTS

SERVICE/REPLACEMENT PART RECORD (Page 1)

DECKING					
Part Number	**Description**		**QTY**	**Order Date**	**Price**
999-0844-920SP	Head/Back Deck & Hardware Pack		1 Deck		
999-0844-930SP	OR - Foot Deck & Hardware Pack		1 Deck		
999-0844-940SP	OR - Knee Deck & Hardware Pack		1 Deck		
	Deck Hardware Pack - INCLUDES . . .		1 Pkg		
Separate Hardware Pack 999-0844-990	4	Clevis Pins			
	5	5/16” Retaining Rings (Deck Brackets)			
	2	12mm Retaining Ring (Cntrl Arms to Decks)			
	1	Installation Instruction Sheet			

MOTORS (ACTUATORS)					
Part Number	**Description**		**QTY**	**Order Date**	**Price**
999-0831-051SP	HI/LO Motor (Cable attached) & Hardware Pack		1 Motor		
999-0822-052SP	OR - Head Motor (Cable attached) & Hardware Pack		1 Motor		
999-0822-053SP	OR - Foot Motor (Cable attached) & Hardware Pack		1 Motor		
	Motor Hardware Pack- INCLUDES . . .		1 Pkg		
Separate Hardware Pack 999-0844-991	2	12mm Retaining Rings			
	2	Hair Pin Clips			
	2	Snap Rings			
	8	Standard Cable Ties			
	1	Installation Instruction Sheet			

CONTROL BOX & POWER CABLES				
Part Number	**Description**	**QTY**	**Order Date**	**Price**
999-0831-300	Linak Control Box	1 Box		
999-0775-208	Detachable 3-Prong Power Cable	1 Cable		
999-0775-206	Optional 2-Prong Power Cable (no ground)	1 Cable		

PENDANT/HAND CONTROLLER				
Part Number	**Description**	**QTY**	**Order Date**	**Price**
999-0806-301	Backlit Pendant/Hand Controller	1 Pendant		
999-0791-000	Pendant Holster	1 Holster		

OPTIONAL UNDERBED LIGHT & ADAPTOR CABLE				
999-0806-220	Underbed Light	1 Unit		
999-0806-212	Underbed Light Adaptor Cable	1 Cable		

SERVICE/REPLACEMENT PART RECORD (Page 2)

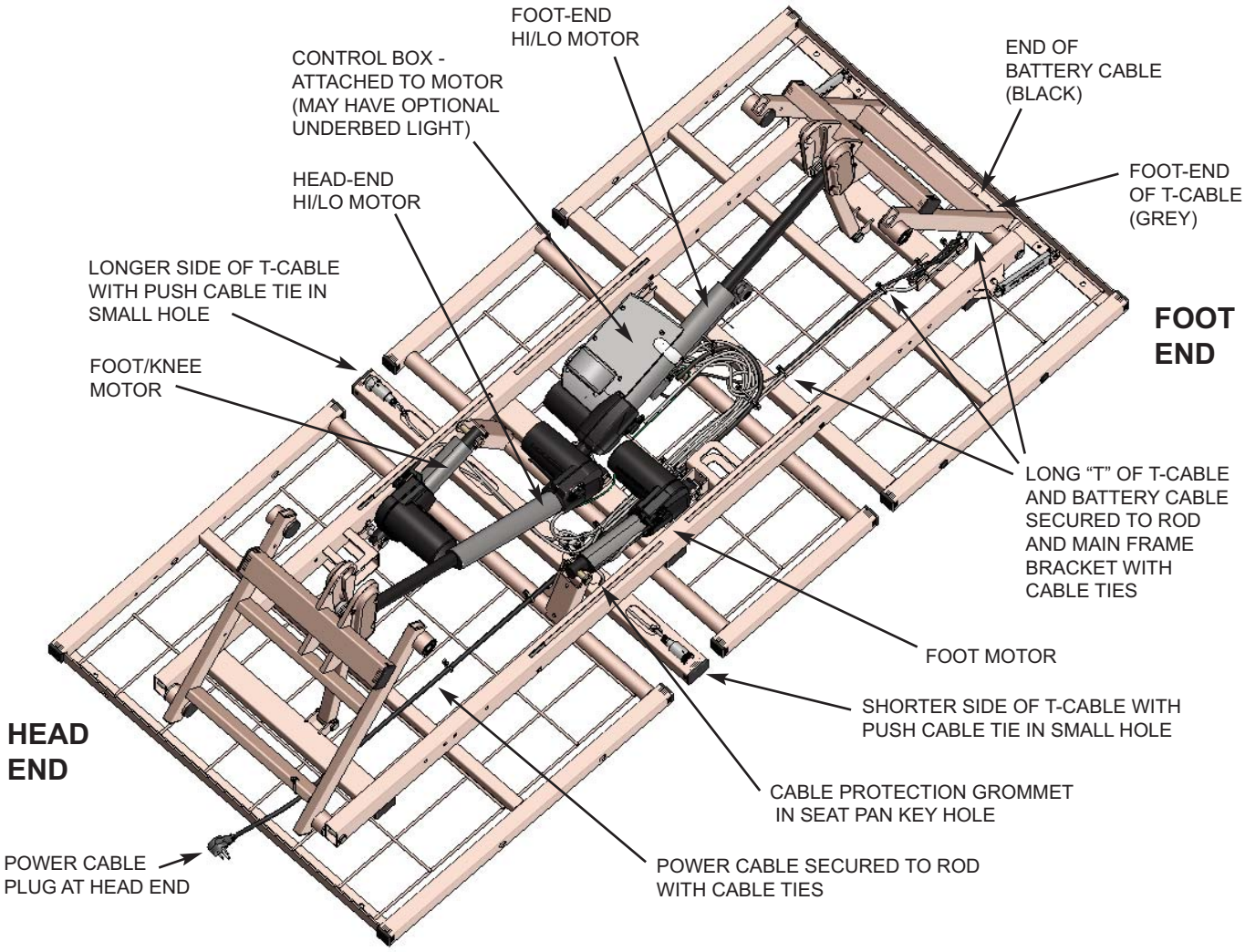
DOUBLE T-CABLE					
Part Number	**Description**		**QTY**	**Order Date**	**Price**
999-0806-200SP	Grey Double "T" Control Cable		1 Pack		
	Double "T" Cable Hardware Pack - INCLUDES . . .		1 Pkg		
Separate Hardware Pack 999-0844-993	1	Split Stem Cable Retainer (Bumper)			
	2	Push Cable Ties			
	6	Standard Cable Ties			
	1	Installation Instruction Sheet			

BATTERY BACKUP CABLE & BATTERY BACKUP PACK (NOT-STANDARD)				
Part Number	**Description**	**QTY**	**Order Date**	**Price**
999-0831-003	Battery Pack (Portable or Mounted)	1 Pack		
999-0831-200	Battery Backup Cable (Needed for Portable Battery Pack)	1 Cable		

STAFF CONTROL					
Part Number	**Description**		**QTY**	**Order Date**	**Price**
999-0877-901	Switch Pad with Bezel & Cables		1 Unit		
ZL877000	**Staff Control Service Pack - INCLUDES . . .**		1 Pkg		
PLEASE SEE PAGE 14 FOR INSTALLATION INSTRUCTIONS	1	Switch Pad with Bezel & Cables			
	1	Shroud (Cable Cover)			
	6	#6 Phillips Head Truss Screws			
	3	4" Nylon Cable Tie			
	1	Installation Instruction Sheet			

CAPS & PLUGS				
Part Number	**Description**	**QTY**	**Order Date**	**Price**
NOTE: CAPS & PLUGS CAN ONLY BE PURCHASED IN SETS OF 12				
100-4200-004PK	**1.25" x 1.25" Square Caps Pack**	12/pkg		
100-4700-015PK	**1.00" x 1.00" Square Caps Pack (arm ends)**	12/pkg		
100-4700-017PK	**1.00" x 2.00" Rectangular Caps Pack**	12/pkg		
100-4700-021PK	**.75" x 1.50" Rectangular Caps Pack**	12/pkg		
100-4700-018PK	**1.25" x 2.00" Rectangular Caps Pack**	12/pkg		
100-4715-011PK	**1.50" Round End Caps Pack (cover arm bearings)**	12/pkg		
999-0775-001PK	**Half Moon End Caps Pack (caster bases)**	12/pkg		
100-4762-002PK	**5/8" Round Plugs Pack (both sides of foot deck)**	12/pkg		
100-4738-005PK	**3/8" Round Plugs (on main frame rails - foot end)**	12/pkg		
FOR GENERAL CAP/PLUG DIAGRAMS PLEASE SEE PAGES 36 & 37				

SERVICE/REPLACEMENT PART DIAGRAM - ELECTRONICS


FOOT-END HI/LO MOTOR
CONTROL BOX - ATTACHED TO MOTOR (MAY HAVE OPTIONAL UNDERBED LIGHT)
END OF BATTERY CABLE (BLACK)
HEAD-END HI/LO MOTOR
FOOT-END OF T-CABLE (GREY)
LONGER SIDE OF T-CABLE WITH PUSH CABLE TIE IN SMALL HOLE
FOOT END
FOOT/KNEE MOTOR
LONG "T" OF T-CABLE AND BATTERY CABLE SECURED TO ROD AND MAIN FRAME BRACKET WITH CABLE TIES
FOOT MOTOR
SHORTER SIDE OF T-CABLE WITH PUSH CABLE TIE IN SMALL HOLE
HEAD END
CABLE PROTECTION GROMMET IN SEAT PAN KEY HOLE
POWER CABLE PLUG AT HEAD END
POWER CABLE SECURED TO ROD WITH CABLE TIES

1. **TO ORDER A REPLACEMENT HI/LO MOTOR USE SERVICE PACK 999-0831-051SP** (Includes motor, mounting hardware & installation instruction sheet).

2. **TO ORDER A REPLACEMENT HEAD MOTOR USE SERVICE PACK 999-0822-052SP** (Includes motor, mounting hardware & installation instruction sheet).

3. **TO ORDER A REPLACEMENT FOOT MOTOR USE SERVICE PACK 999-0822-053SP** (Includes motor, mounting hardware & installation instruction sheet).

4. **TO ORDER A REPLACEMENT CONTROL BOX PLEASE USE 999-0831-300** (Includes control box, detachable power cord, control cable, ground wire screw, cable ties, & installation instruction sheet).

5. **TO ORDER A REPLACEMENT DOUBLE T-CABLE USE SERVICE PACK 999-0806-200SP** (Includes T-Cable, cable ties, grommets & installation instruction sheet).

6. **TO ORDER A REPLACEMENT BATTERY CABLE USE PART 999-0844-200SP. FOR A NEW UNDERBED LIGHT USE PART 999-0806-220. FOR A NEW LIGHT BOX CABLE USE 999-0806-212.**

WHEN ORDERING REPLACEMENT PARTS WITH CUSTOMER SERVICE,
PLEASE HAVE THE BED SERIAL NUMBER AVAILABLE
TO CONFIRM WHETHER THE PART IS COVERED UNDER WARRANTY.
(SEE PAGE 24 FOR LOCATION OF SERIAL NUMBER ID LABEL.)

OPTIONAL BATTERY BACKUP REPLACEMENT CONFIGURATIONS

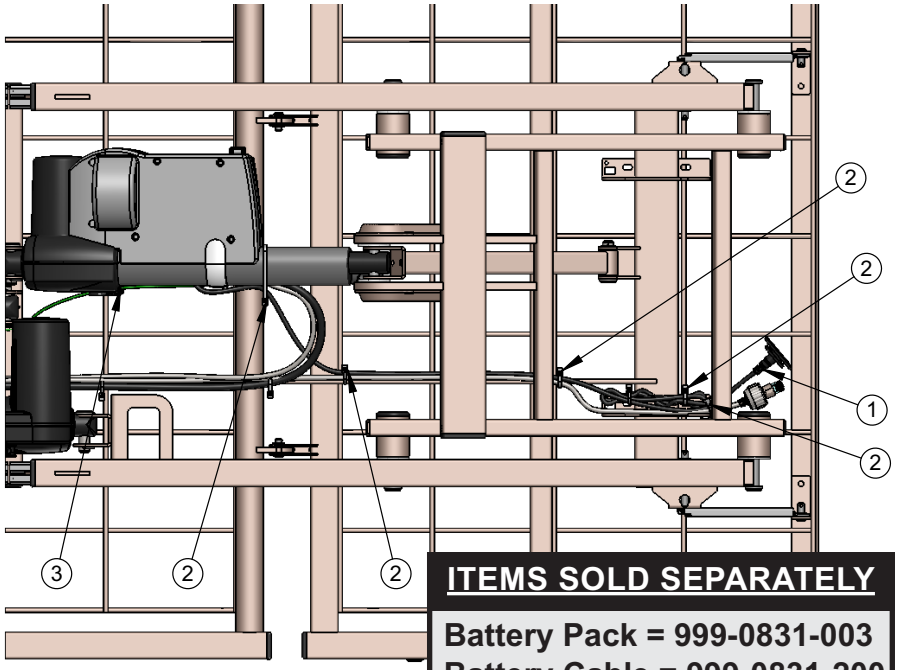
Configuration 1:
Replacing Single Battery Cable for a "Portable" Battery Backup Unit

1. Replacing the existing battery backup cable **(Part 999-0831-200)** is fairly simple. First, if the external battery unit is hooked up, unplug it from the foot-end battery cable plug (#1).

2. Carefully cut all cable ties (#2).

3. Unplug the existing cable from the Control Box (#3). Plug in the new cable and run along same path as previous cable.

4. Use cable ties to re-secure to tie rod and mounting brackets (#2).

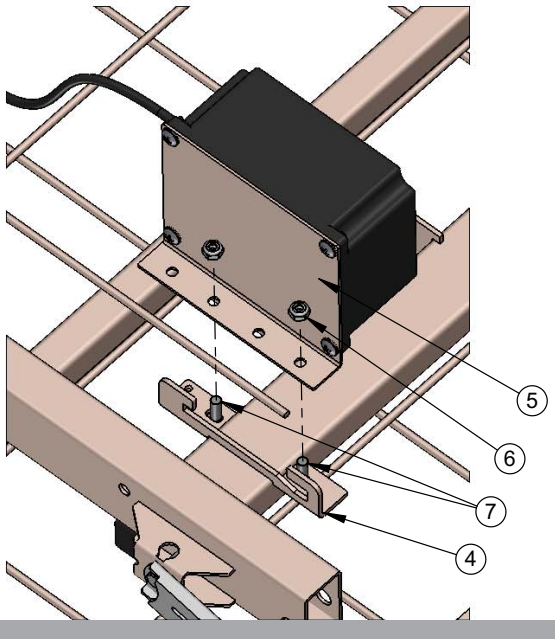


ITEMS SOLD SEPARATELY

Battery Pack = 999-0831-003
Battery Cable = 999-0831-200
Charger = Please call

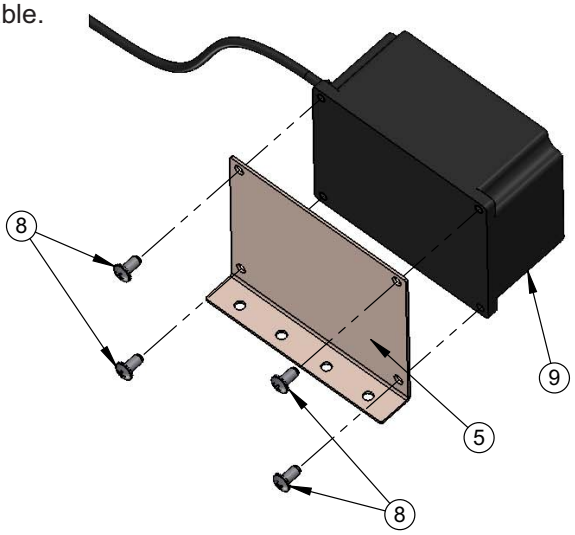
Configuration 2:
Replacing Mounted Battery Backup Unit (includes attached battery cable)

1. If the APS bed came with a mounted Battery Backup Pack **(Part 999-0831-003)** you must first unplug the power cord from the wall unit, then unplug the attached battery cable from the Control Box. Carefully cut all cable ties along the battery cable.



2. Using a 3/8" socket wrench, remove the two Nylon Lock Nuts (#6 - **Part 100-6725-003**) that secure the Battery Mounting Bracket (#5 - **Part 999-0831-001G**) to the welded Main Frame Bracket (#4). Remove the bolts (#7 - **Part 100-5225-009**) and set aside.

3. Once the Bracket and Battery Pack (#9) are free, remove the pack from the bracket by unscrewing the four Phillips Head Screws (#8 - **Part 100-5414-001**). Place the new battery pack on the bracket and reverse the process to reattach bracket and cable.

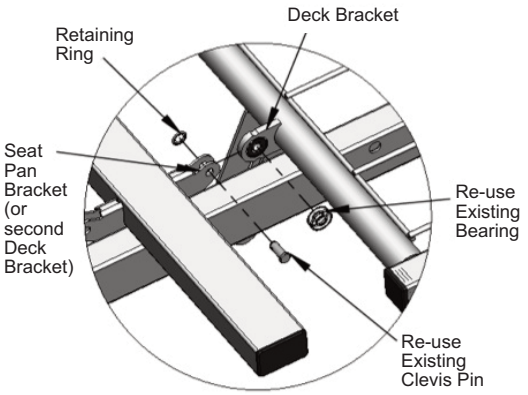


SECTION E

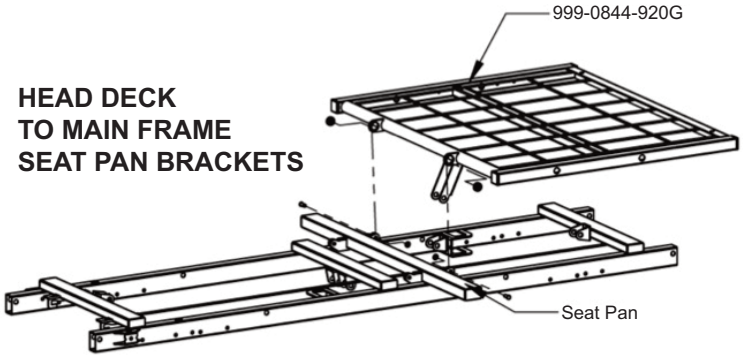
FRAMING SERVICE PARTS

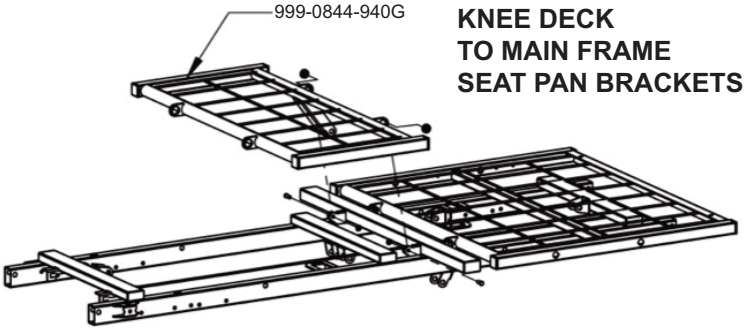
For All Zenith APS 9000 Bed Models

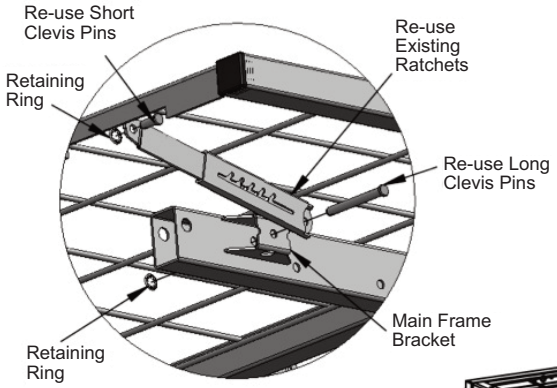
SERVICE/REPLACEMENT PART DIAGRAM - DECKING



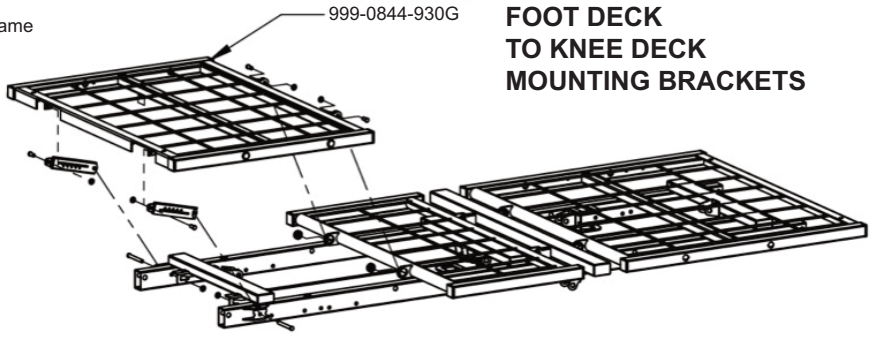
DETAIL OF DECK ATTACHMENT (Similar for all decks)







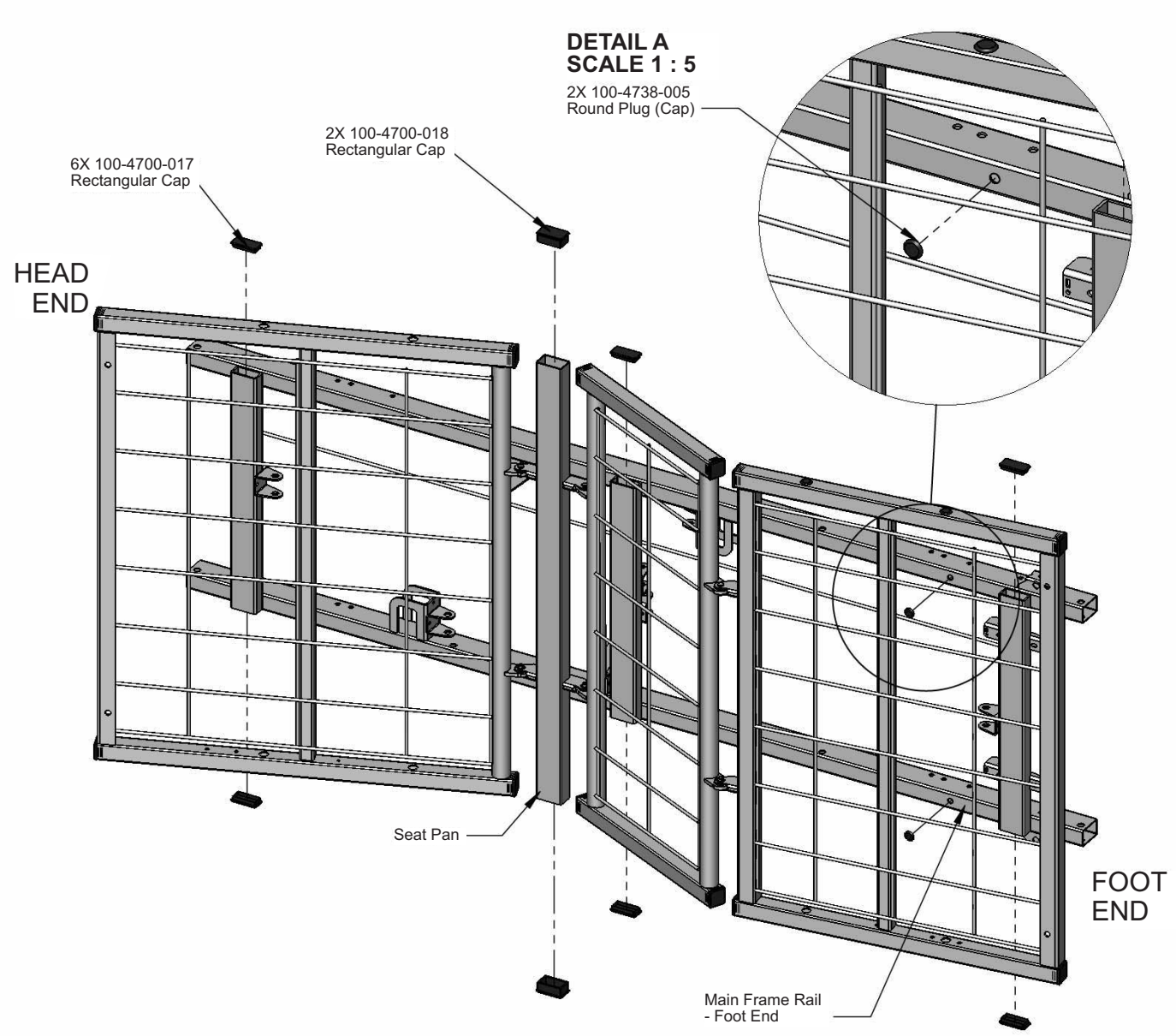
DETAIL OF EDEMA RATCHET RE-ATTACHMENT (Use existing ratchets and hardware)



1. **TO ORDER A REPLACEMENT HEAD DECK USE SERVICE PACK 999-0844-920SP** (includes deck, mounting hardware & installation instruction sheet).
2. **TO ORDER A REPLACEMENT KNEE DECK USE SERVICE PACK 999-0844-940SP** (includes deck, mounting hardware & installation instruction sheet).
3. **TO ORDER A REPLACEMENT FOOT DECK USE SERVICE PACK 999-0844-930SP** (includes all deck, mounting hardware & installation instruction sheet). Re-use existing edema ratchets & ratchet hardware.

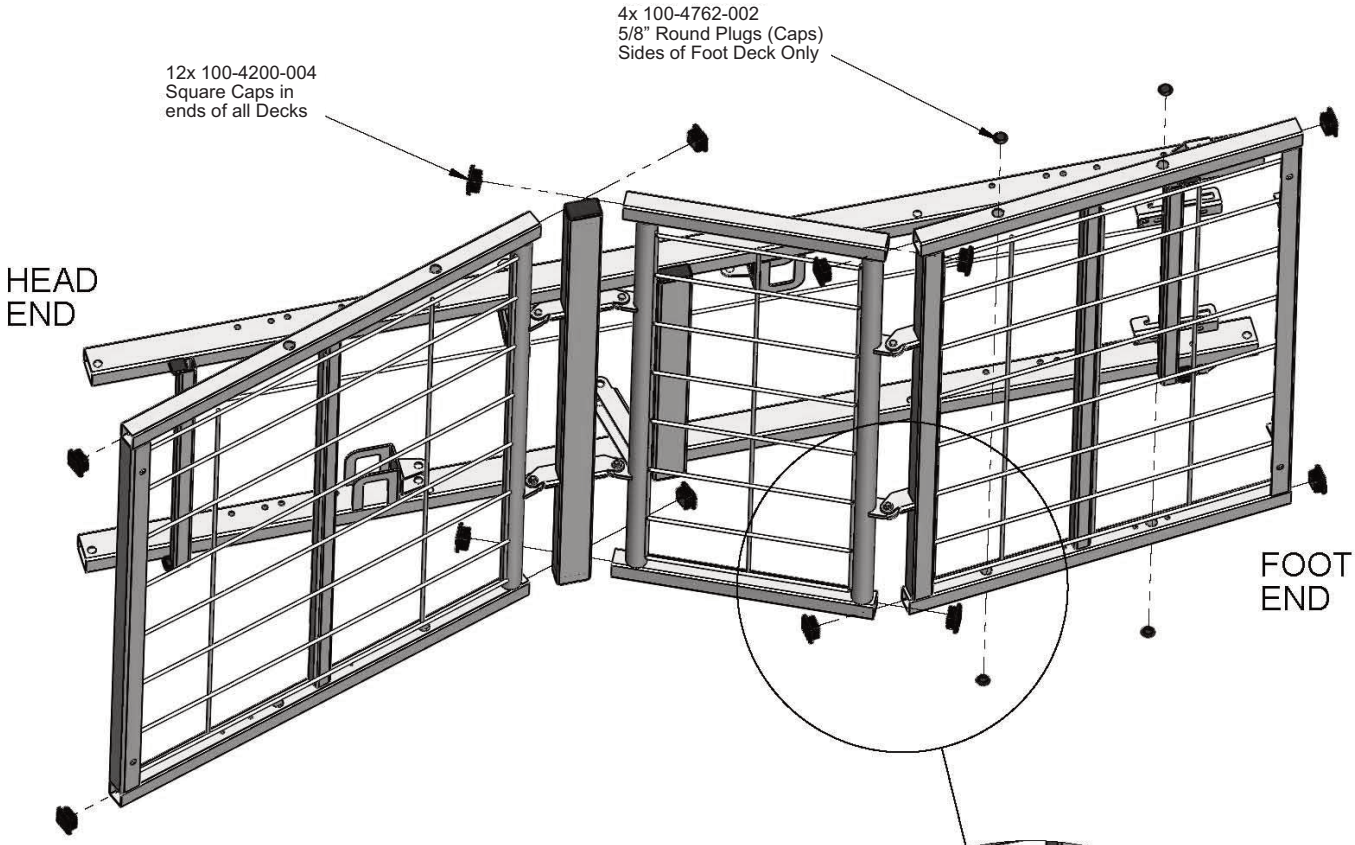
WHEN ORDERING REPLACEMENT PARTS WITH CUSTOMER SERVICE,
PLEASE HAVE THE BED SERIAL NUMBER AVAILABLE
TO CONFIRM WHETHER THE PART IS COVERED UNDER WARRANTY.
(SEE PAGE 24 FOR LOCATION OF SERIAL NUMBER ID LABEL.)

SERVICE/REPLACEMENT PART DIAGRAM - MAIN FRAME CAPPING

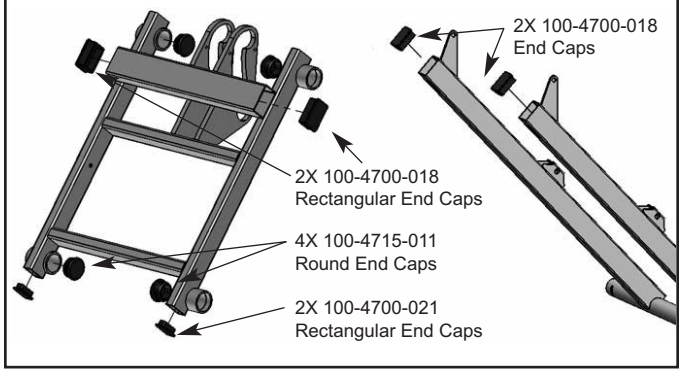


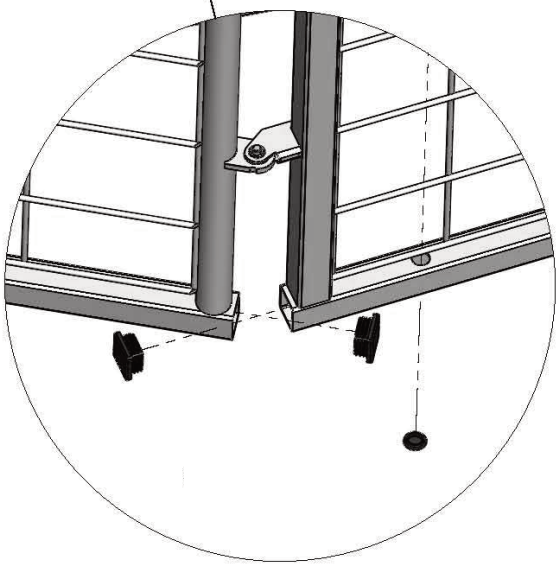
CAPS OR PLUGS ARE NOT COVERED UNDER WARRANTY
(PACKS OF 12 CAN BE ORDERED IN THE EVENT YOU DAMAGE OR LOSE
ANY CAPS/PLUGS ON THE BED - SEE BOTTOM OF PAGE 31 FOR ORDER NUMBERS)

SERVICE/REPLACEMENT PART DIAGRAM - CAPPING ON HEAD, KNEE, AND FOOT DECKS



CAPPING ON ARMS & LEGS





CAPS OR PLUGS ARE NOT COVERED UNDER WARRANTY
(PACKS OF 12 CAN BE ORDERED IN THE EVENT YOU DAMAGE OR LOSE
ANY CAPS/PLUGS ON THE BED - SEE BOTTOM OF PAGE 31 FOR ORDER NUMBERS)

SECTION E

TROUBLESHOOTING

All Zenith APS 9000 Models

TROUBLESHOOTING - NOTHING WORKS - NO POWER

1. NOTHING WORKS - NO POWER

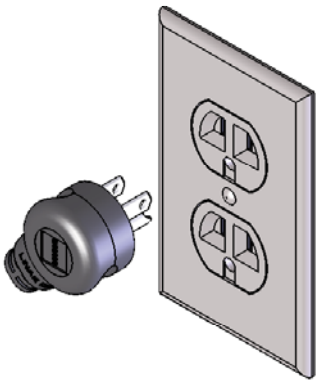
a. Check to make sure there is power coming from the outlet. Unplug the power cable from the outlet and test the outlet by plugging in a lamp or similar portable device. **OUTLET WORKS** = move to Step b.

b. Replug the power cord into the outlet - **NOTHING WORKS** - UNPLUG THE POWER CORD and check the power cord from the head end to the control box, making sure it is not pinched, frayed, or damaged in any way.

- **POWER CORD IS PINCHED** = With cord unplugged, try to move the bed part slightly to release the pinched cord. If you can release the cord, re-plug the power cord into the wall outlet and test the bed.

- **BED WORKS** = Make sure the cord is not frayed or exposed. If it is OK, you should not have to replace.

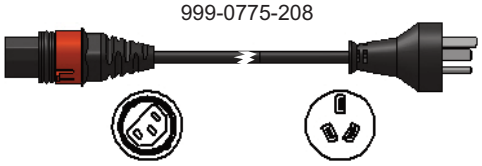
- **POWER CORD IS DAMAGED** = Cut cable ties and immediately replace Power Cord.



Test Outlet for Power.

Unplug Power Cord and check entire cord to make sure it is not pinched, frayed, or damaged.

3-Prong Power Cable
999-0775-208



ALWAYS UNPLUG THE POWER CORD BEFORE DOING ANY ELECTRICAL WORK ON THE BED.

IF 3-PRONG POWER CORD IS DAMAGED, REPLACE IMMEDIATELY!

TROUBLESHOOTING STAFF CONTROL - BLINKING LIGHTS

1. STAFF CONTROL LIGHTS ARE BLINKING - NOTHING ON STAFF CONTROL WORKS BUT PENDANT WORKS

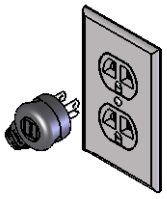
a. This could mean the staff control is not getting enough power from the Control Box.

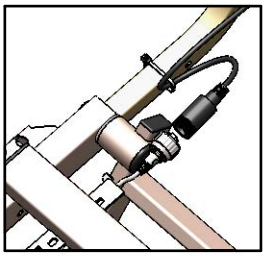
b. Unplug the power cord from the wall outlet. Unplug the staff control cable from the T-Cable at the foot end of the bed.

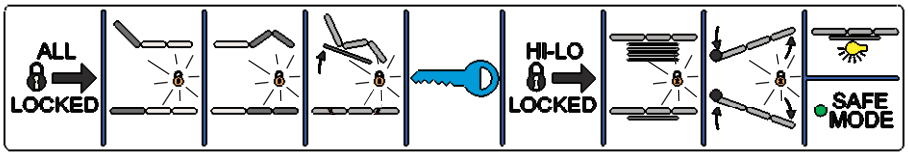
c. If you have a spare staff control assembly, plug the cable into the T-Cable at the foot end and test.

- **WORKS AND LIGHTS NO LONGER BLINK** = Replace the Staff Control Assembly in the foot-board. (See page 42 for dis-assembly. Please see page 31 for order number.)

- **DOESN'T WORK & LIGHTS STILL BLINKING** = Replace the Control Box. (Please see Page 30 for order number).



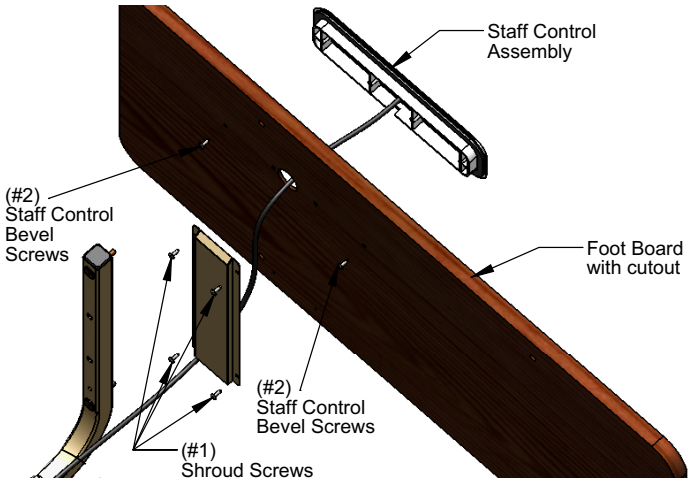




NOTHING ON STAFF CONTROL WORKS BUT PENDANT WORKS

1. Check the Staff Control connections at the foot end. Is the Staff Control Cable plugged securely into the T-Cable? Also check if the other end of the T-Cable is plugged securely into the Control Box (or Underbed Light). If the **STAFF CONTROL STILL DOESN'T WORK** = go to step b.

2. Unplug the Power Cord from the wall outlet. Remove the Cable Cover (Shroud) on the inside of the footboard and locate the single terminal end that plugs directly into the back of the Staff Control Panel. Make sure it is properly seated into the panel. Plug in the power cord and test the staff control. If the **STAFF CONTROL STILL DOESN'T WORK** = Replace the Staff Control Assembly. (See page 42 for dis-assembly. See page 31 for order information.)


Staff Control Assembly
(#2) Staff Control Bevel Screws
Foot Board with cutout
(#2) Staff Control Bevel Screws
(#1) Shroud Screws

TROUBLESHOOTING PENDANT & DOUBLE T-CABLE

1. STAFF CONTROL WORKS BUT PENDANT/ HAND CONTROLLER FUNCTION DOESN'T

a. Check to see if the functions are locked out on the Staff Control panel - if orange lock icons show on panel then that function is locked out. Press the Key and Function (i.e. Head) button at the same time until the orange lock icon goes out. Test the function. If the **PENDANT STILL DOESN'T WORK** = go to step b.

b. Check the connections at the seat pan (Pendant/Hand Controller to T-Cable) and Staff Control Cable connection to the T-Cable at the foot end making sure plugs are fully engaged. Also check the T-Cable connection at the Control Box. If you have an Underbed Light feature, make sure all cables are secure. If the **PENDANT STILL DOESN'T WORK** = move to step c.

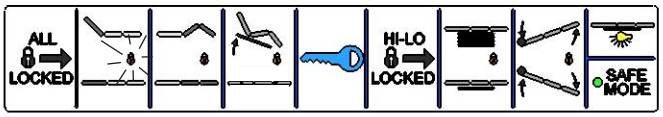
c. UNPLUG THE POWER CORD FROM THE WALL OUTLET.

d. Unplug the Pendant/Hand Controller plug from the end of the T-Cable on either side of the beds Seat Pan. Unplug the Staff Control Cable from the end of the T-Cable at the foot end of the bed and unplug the other end from the Control Box.

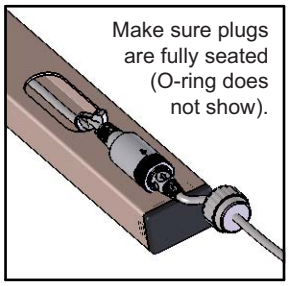
e. Plug the Pendant/Hand Controller plug directly into the HB port on the Control Box, making sure it is fully seated. Plug in the Power Cord and test the Pendant.

- **ALL BUTTONS WORK** = Replace the T-Cable (See page 31 for order information.)
- **NOTHING WORKS** = Replace the Hand Controller. (See page 30 for order information.)

If orange lock icon lit, press key symbol and function to unlock. A

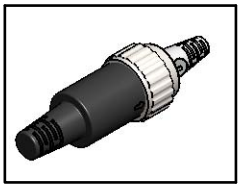


B

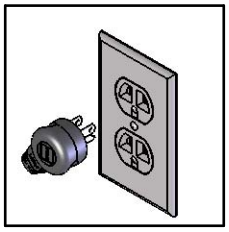


Make sure plugs are fully seated (O-ring does not show).

Make sure plugs at foot end are fully seated and cap locked on. B

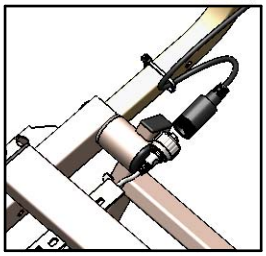


C



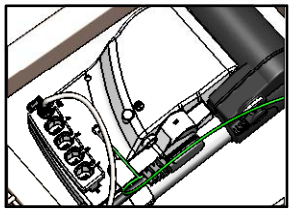
Unplug Power Plug before working on bed electronics.

Unplug Staff Control Cable from T-Cable at foot end. D

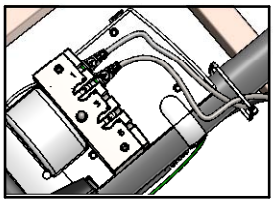


Plug Pendant Cable directly into HB port on Control Box (or into port 2 in Underbed Light Box) and test.

E



E



TROUBLESHOOTING MOTOR CABLES & CONTROL BOX

1. HEAD, FOOT, OR HI/LO FUNCTION NOT WORKING

a. Check plugs to make sure they are firmly seated in all ports on the Control Box and are plugged into the correct ports (See diagram at right).

b. Check all cables to make sure they are not frayed, pinched, or damaged in any way. If any cable is damaged, UNPLUG THE BED'S POWER CORD FROM THE WALL OUTLET and REPLACE THE CABLE AND/OR THE ELECTRONIC COMPONENT.

c. HEAD DECK NOT RAISING - Unplug the power cord. Switch the head and foot plugs (Ports 1 and 3). Re-plug the power cord and press the FOOT button to test.

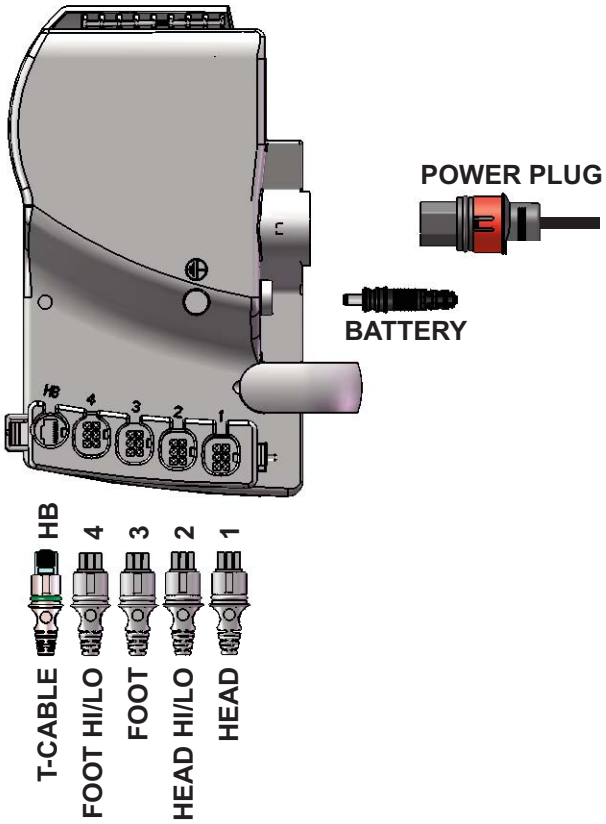
- **HEAD WORKS** = Control Box head port bad. Replace box (See page 30 for order information.)
- **DOESN'T WORK** = Replace the Head Motor. (See page 30 for order information.)

d. FOOT AND KNEE DECKS NOT RAISING - Unplug the power cord. Switch the foot and head plugs (Ports 3 and 1). Re-plug the power cord and press the HEAD button to test.

- **FOOT WORKS** = Control Box foot port bad. Replace box (See page 30 for order information.)
- **DOESN'T WORK** = Replace the Foot Motor. (See page 30 for order information.)

e. BED DOES NOT GO UP AND DOWN IN HORIZONTAL POSITION - If you press the Up or Down HI/LO button and you hear a click or buzz but nothing happens = Check the HI/LO Motors by touching them & pushing the HI/LO buttons.

- **YOU FEEL NOTHING** = possible bad motor - go to the third step below.
- **YOU FEEL SLIGHT VIBRATION** = Motor OK.
- **Unplug the Power Cord** = Switch the two HI/LO plugs (ports 4 and 2) in the Control Box. Re-plug the power cord and press the same HI/LO button, then touch the same non-vibrating motor.
  - i. **MOTOR NOW VIBRATES** = Bad port in the Control Box - Replace box. (See page 30 for order information.)
  - ii. **MOTOR DOES NOT VIBRATE** = Replace the bad HI/LO Motor. (See page 30.)



2. BED LOOKS UNLEVEL - HI/LO MOTORS ARE NOT IN SYNC

a. Press the HI/LO "DOWN" button repeatedly on either the Staff Control or Pendant/Hand Controller until the bed goes completely down and rests in its full horizontal position. The two HI/LO motor shafts should be completely retracted inside the motors.

QUICK REFERENCE

- **HI/LO & FOOT WORKS, BUT HEAD DOES NOT:** Switch Head & Foot Motor Cable at the Control Box and test (See Step C in left column).
- **HI/LO & HEAD WORKS, BUT FOOT DOES NOT:** Switch Foot & Head Motor Cable at the Control Box and test (See Step D in left column).
- **HEAD & FOOT WORKS, BUT HI/LO DOES NOT:**
  a. Switch Head and Foot HI/LO Motor Cables at the Control Box and test (See Step E in left column).
  b. Test to see if HI/LO Motors need to be re-aligned (See Step F above).

TROUBLESHOOTING/REPLACING THE APS STAFF CONTROL

1. REMOVING AND REPLACING THE STAFF CONTROL ASSEMBLY

a. UNPLUG THE POWER CORD FROM THE WALL OUTLET.

b. Unscrew the four Phillips Screws (#1) that attach the Shroud (cable cover) to the footboard and set aside.

c. At the foot end of the bed, unscrew the retaining cap on the T-Cable (#3) and unplug the two cables.

d. Unscrew the two remaining Phillips Screws (#2) from the inside of the footboard that attach the Staff Control Assembly bevel to the board. Set aside screws for later re-assembly.

e. Remove the OLD Staff Control Assembly and feed the old cable out through the large hole.

f. Feed the cable of the NEW Staff Control Assembly from the outside through the large hole and insert the bevel into the cutout on the outside of the footboard.

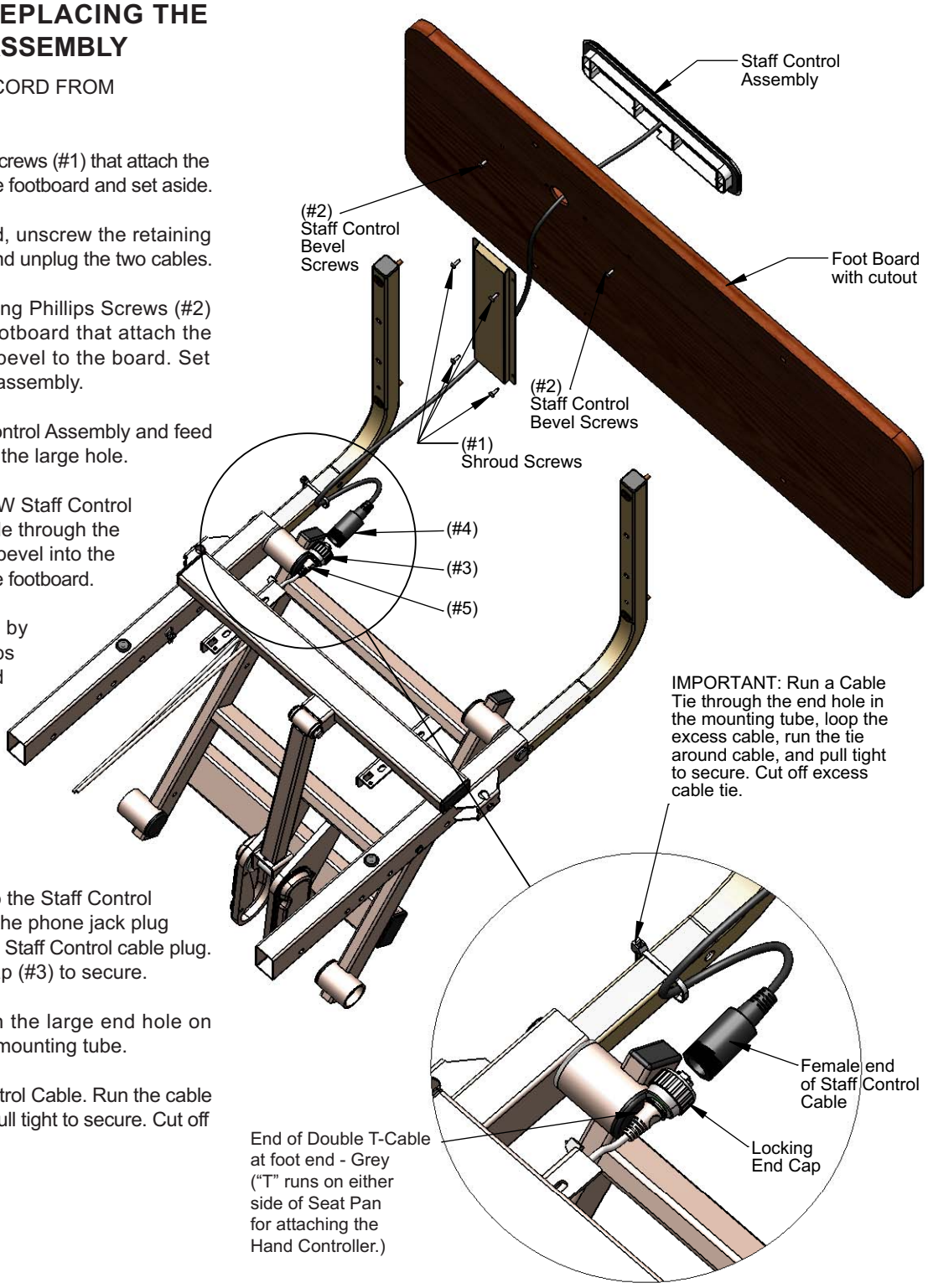
g. Secure the Staff Control by re-inserting the two Phillips Screws (#2) you removed in Step D.

h. Re-position the Shroud on the inside of the footboard and secure with the four Phillips Screws (#1) you removed in Step B.

i. Plug the T-Cable (#5) into the Staff Control Cable (#4), making sure the phone jack plug is seated correctly into the Staff Control cable plug. Screw on the retaining cap (#3) to secure.

j. Run a Cable Tie through the large end hole on the right-hand footboard mounting tube.

k. Loop the excess Staff Control Cable. Run the cable tie around the cable and pull tight to secure. Cut off any excess Cable Tie.


Staff Control Assembly
(#2) Staff Control Bevel Screws
Foot Board with cutout
(#2) Staff Control Bevel Screws
(#1) Shroud Screws
(#4)
(#3)
(#5)
IMPORTANT: Run a Cable Tie through the end hole in the mounting tube, loop the excess cable, run the tie around cable, and pull tight to secure. Cut off excess cable tie.
Female end of Staff Control Cable
Locking End Cap
End of Double T-Cable at foot end - Grey ("T" runs on either side of Seat Pan for attaching the Hand Controller.)

LONG TERM CARE BEDS LIMITED WARRANTY

Products manufactured by Basic American Medical Products are warranted to the original purchaser to be free of defects in material and workmanship for the warranty period listed below commencing from the date of shipment.

	Zenith9000 APS*	Zenith9000* Zenith7000* Zenith5000*	Matrix II	Liberty	Eze-Lok	Flex	Bariatric
Frame	15 years	15 years	15 years	15 years	15 years	15 years	15 years
Motors and Control Box	5 years	5 years	3 years	3 years	n/a	n/a	2 years
Non-specified electronics	3 years	3 years	3 years	3 years	n/a	n/a	2 years
Bed mounted accessories and unspecified components	2 years	2 years	2 years	2 years	2 years	2 years	2 years
Headboards and Footboards	1 year	1 year	1 year	1 year	1 year	1 year	1 year

February 2013

* includes all 230V and Slide-Wide bed models

- **This warranty does not apply to damage resulting from abuse, accident, negligence, misuse, unsuitable environmental conditions, improper cleaning, or caused by unauthorized alteration, repair, maintenance, assembly, or installation.**
- **The beds should be used only for their intended purpose and maintained according to the service manual provided with the bed.**
- **Basic American's liability shall not exceed the original purchase price.**
- **Any repair work or replacement shall not exceed the warranty duration.**
- **Basic American Medical Products will, at its option, repair or replace defective product or parts, provided that the replacement or return has been previously authorized by Basic American or one of its divisions under the terms of this warranty.**

If you have questions regarding a bed's warranty, please contact Basic American Medical Products at 1-800-365-2338.

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Customer Service: 1.800.365.2338 • Fax: 920.929.8213
www.grahamfield.com

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